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Fort Wayne, Ind., July 31, 1896.

Editor Manufacturers' Record, Baltimore, Md.:

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We think that these will be one of the best advertising mediums that can be distributed. We may say the same of the "Record," as a general thing, for it goes into the hands of reputable agents and manufacturers. We can say that we consider an application or an order from subscribers of the "Record" as gilt edge, and, in fact, we have found it to be so in nearly every case.

We must admit that we receive more general inquiries from good men through the "Record" than any advertising medium we employ.

We wish you the greatest success in your various undertakings in the special editions, and can recommend the "Record" as the best general information paper that reaches our office.

FLEMING MANUFACTURING CO.,
By Chas. W. Cook, Manager.

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VOL. XXX.
No. 2.

Baltimore, August 7, 1896.



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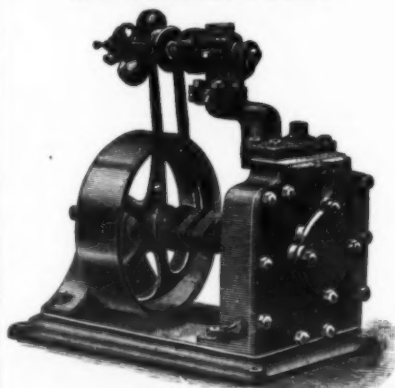
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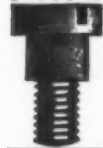
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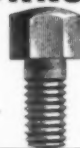


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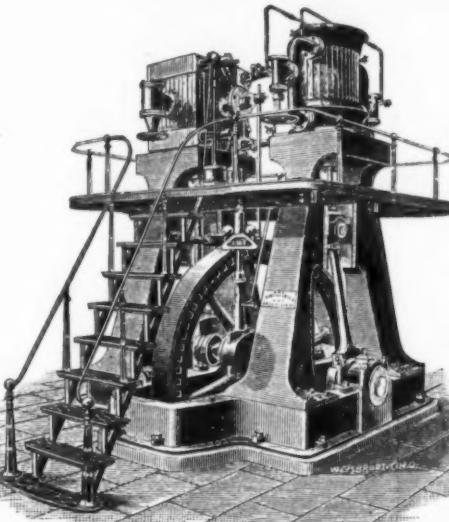
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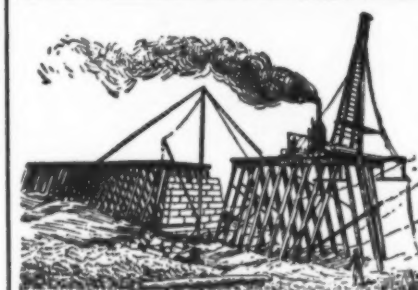
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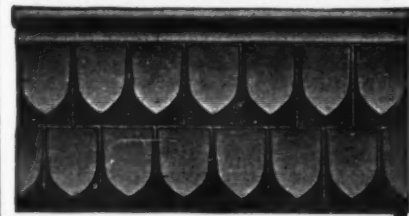
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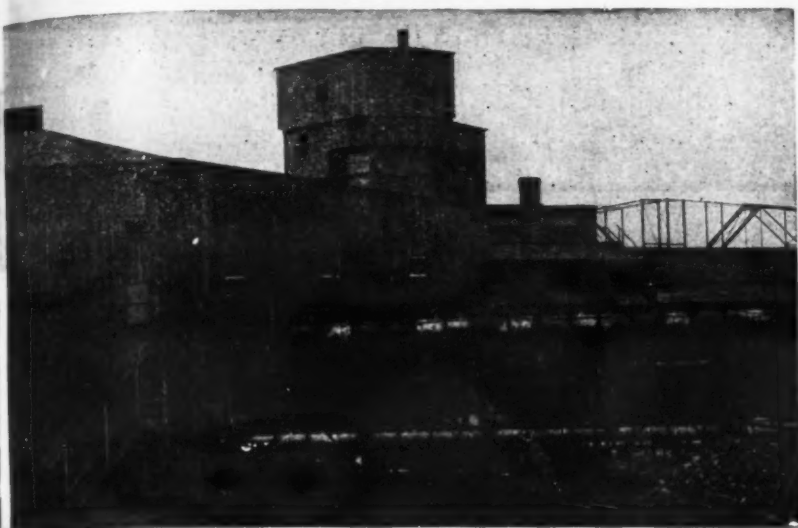
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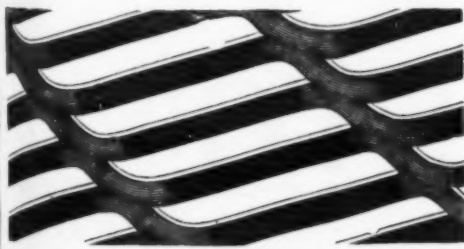
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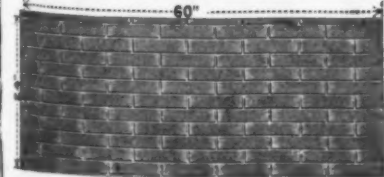
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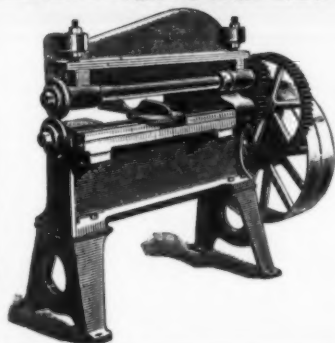
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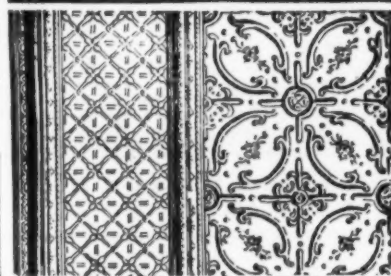


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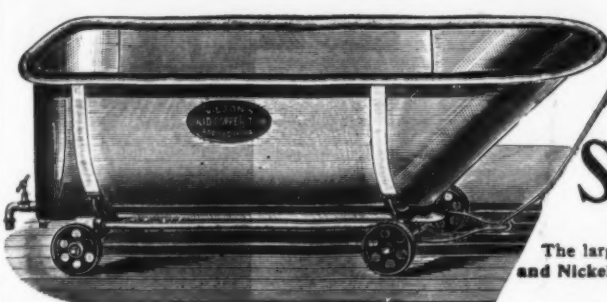
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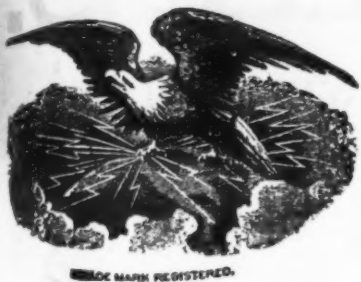
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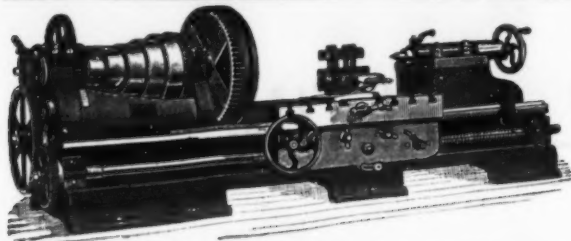
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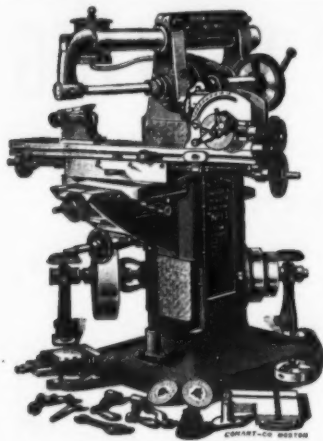
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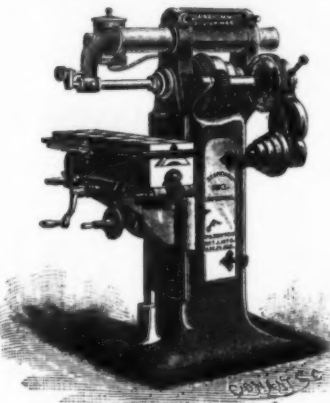


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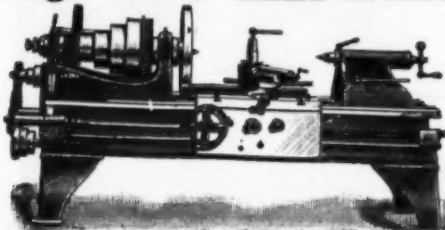
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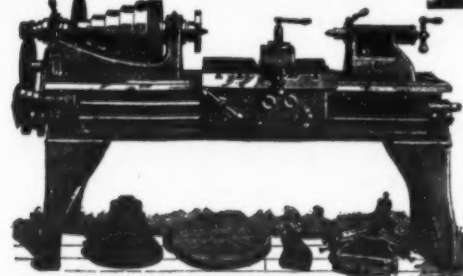
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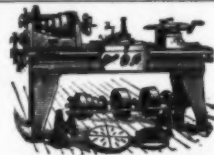
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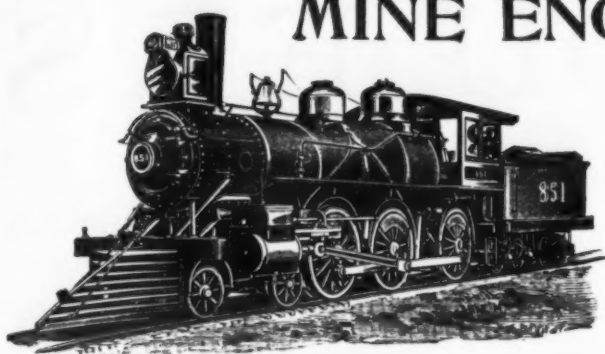
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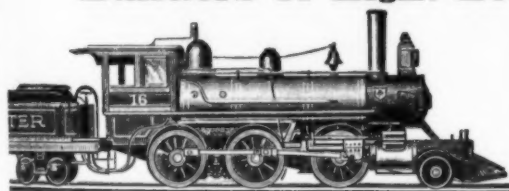
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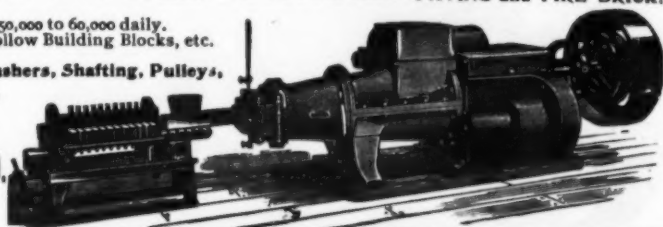
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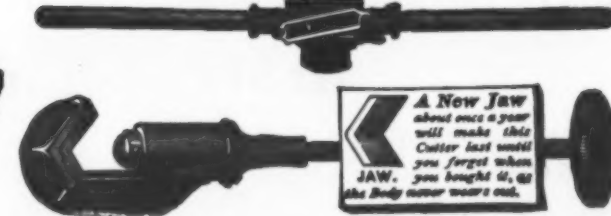
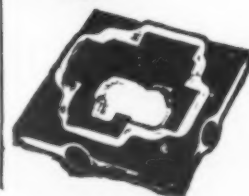
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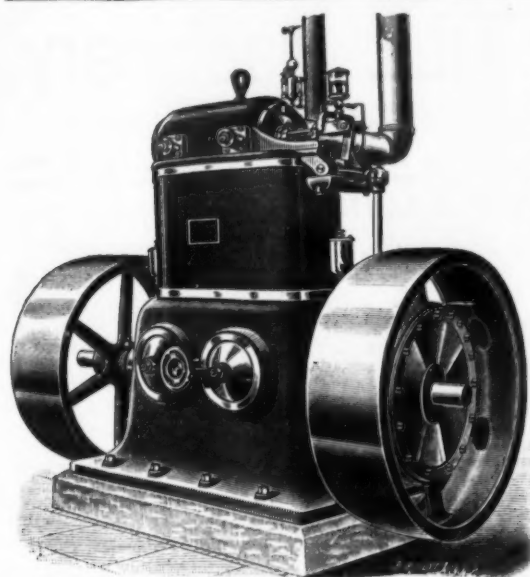
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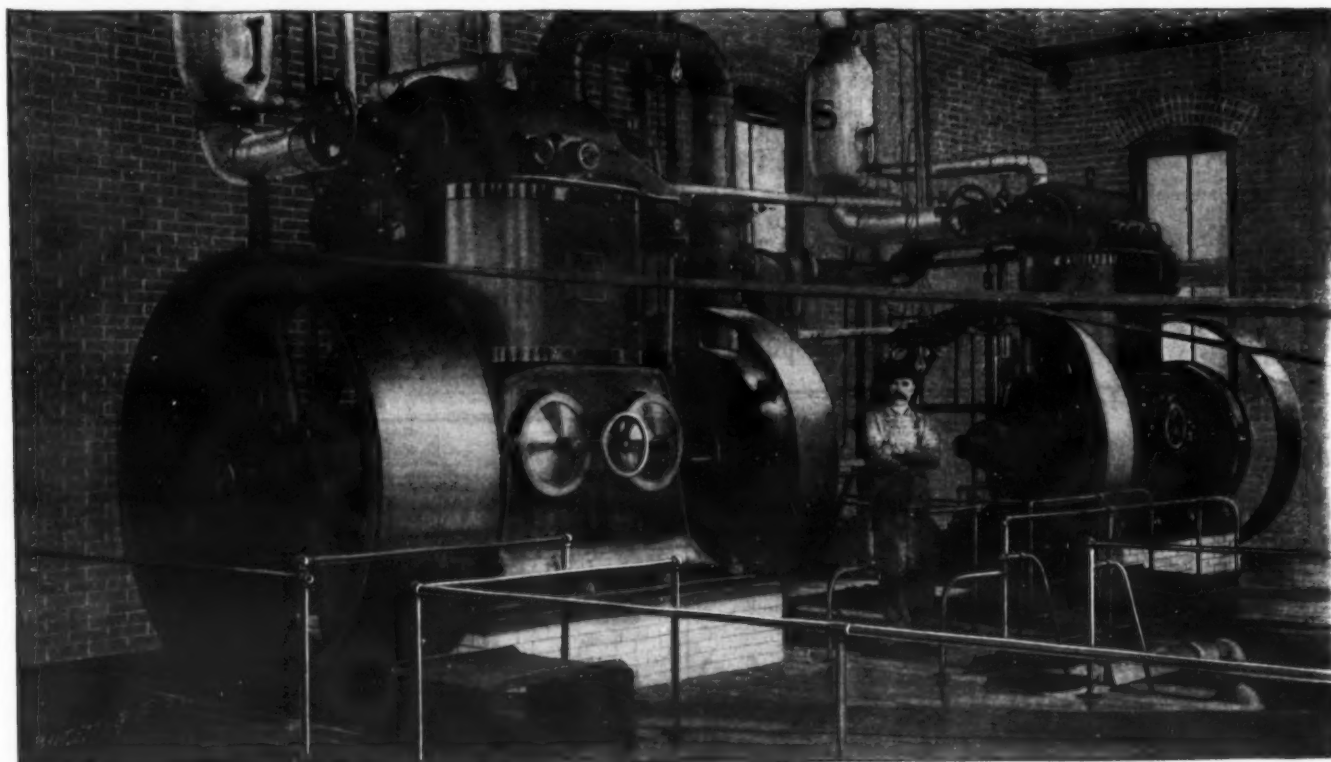
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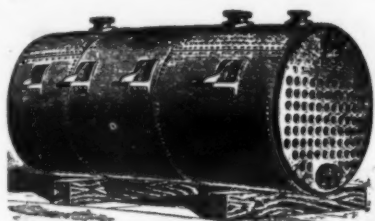
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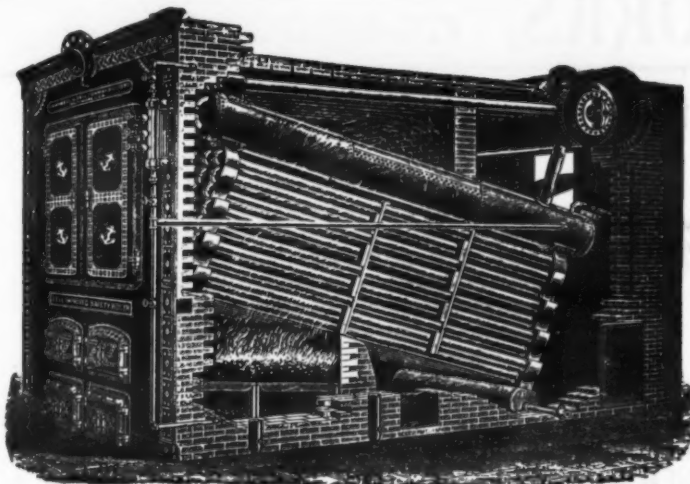
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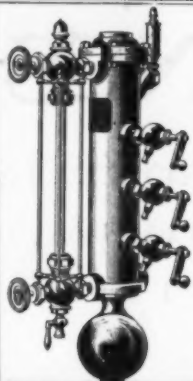
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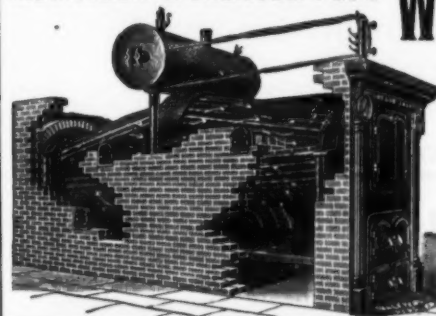
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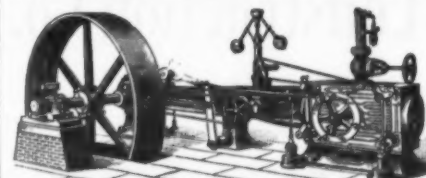
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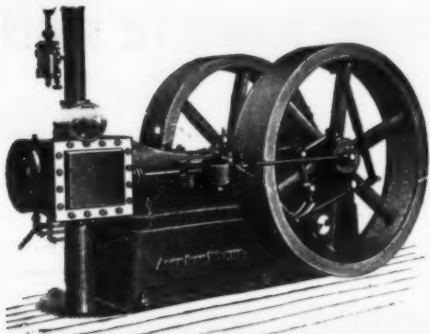
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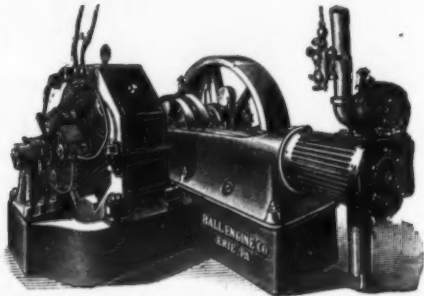
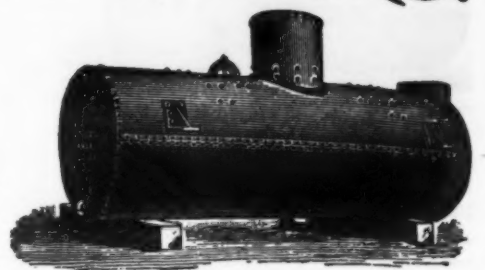
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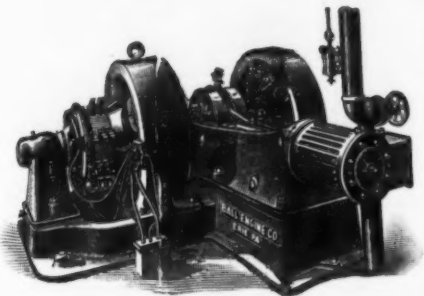
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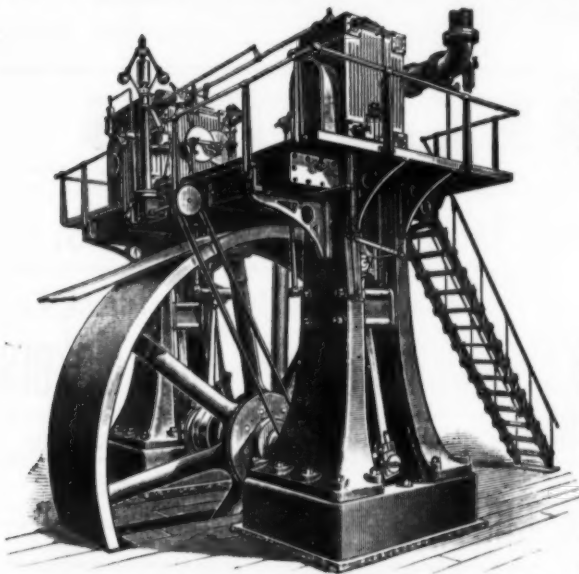
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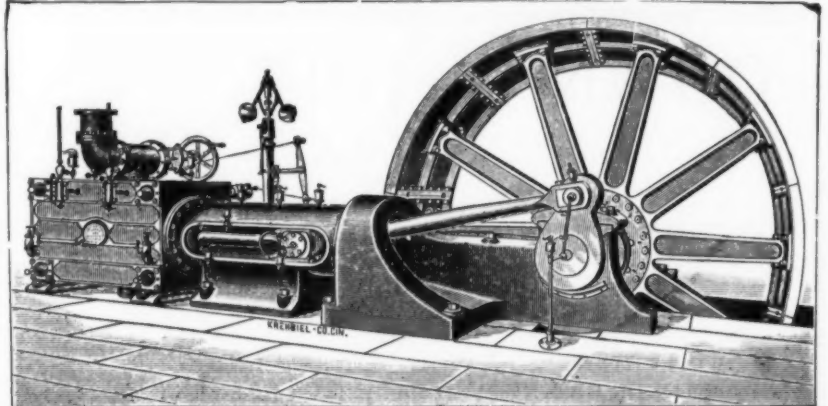
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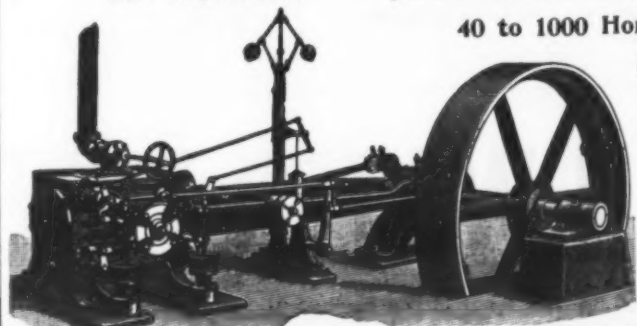
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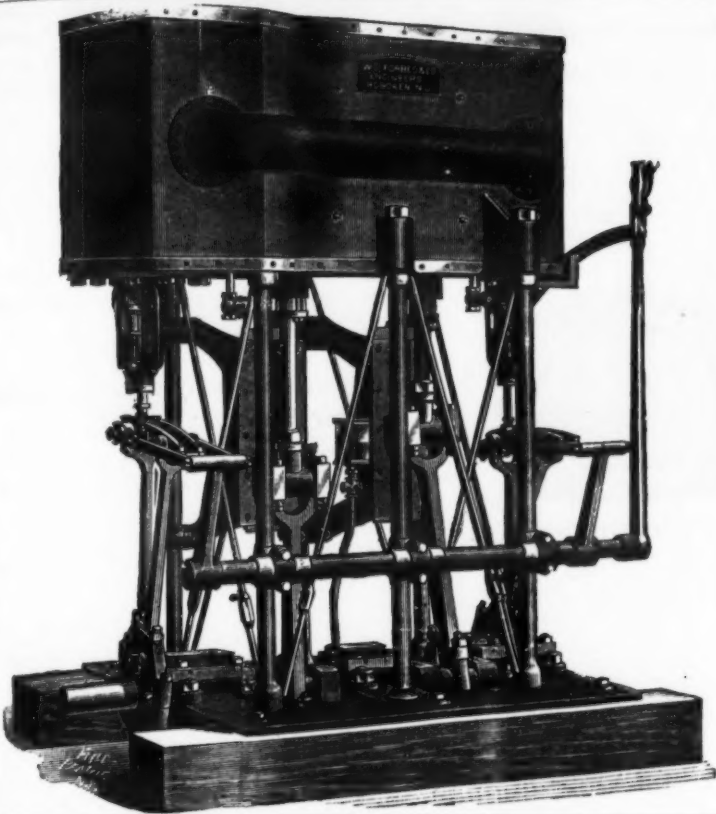
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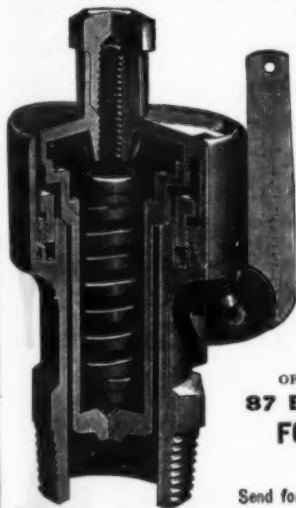


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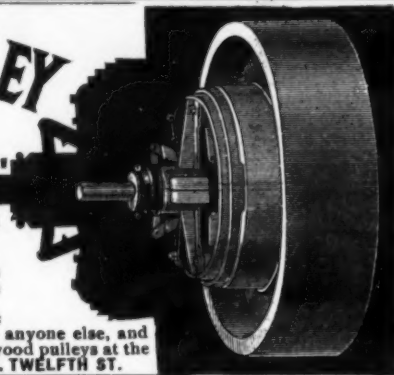
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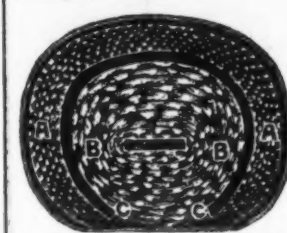
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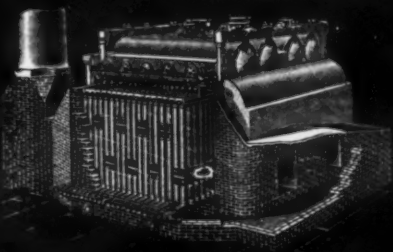
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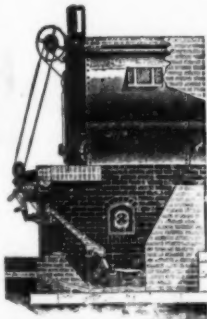
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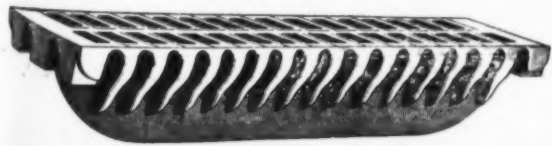
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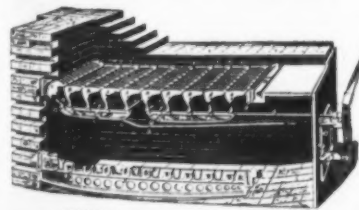
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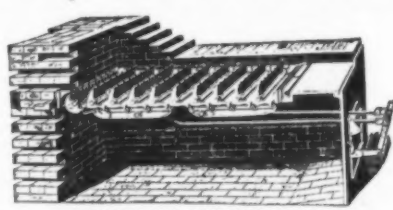
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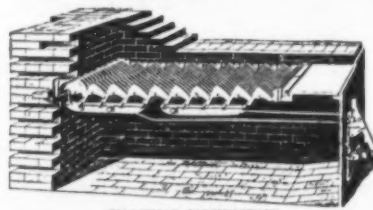
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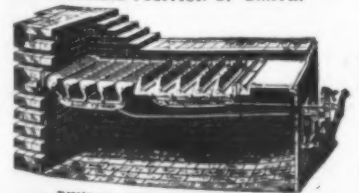
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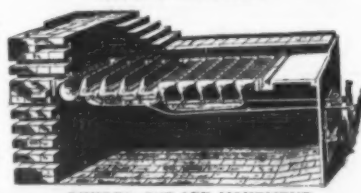
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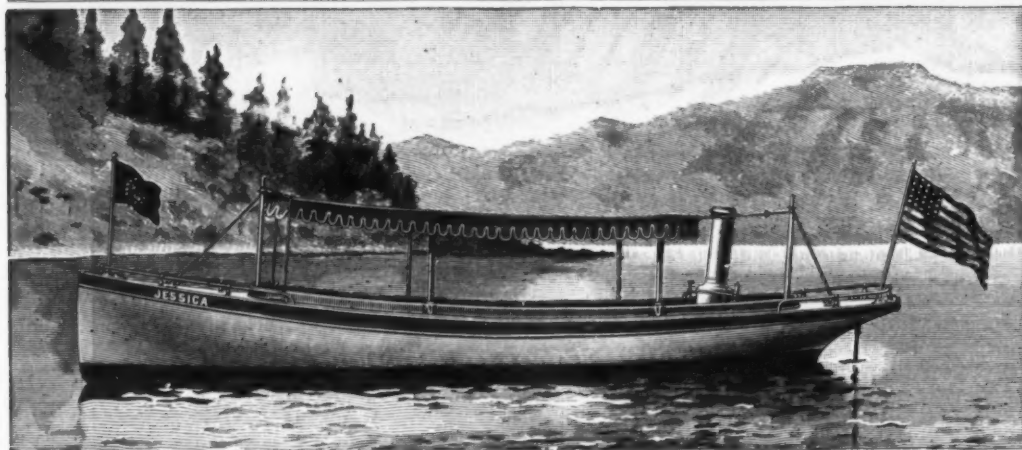
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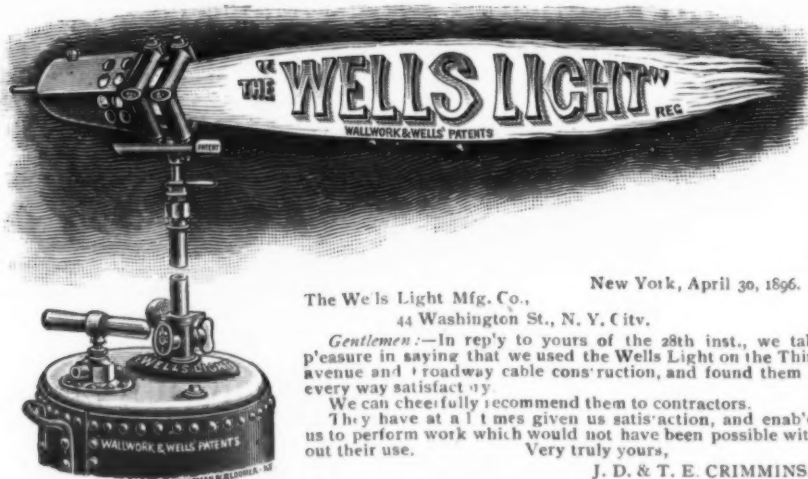
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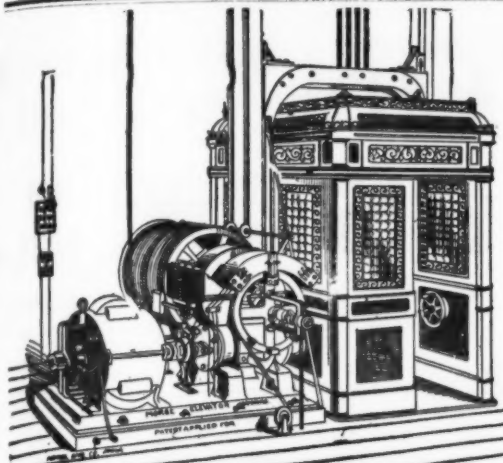
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Bagging fa. tories.....	1	325	300,000	350,000
Barrel factories.....	1	123	225,000	150,000
Basket and willow.....	2	13	10,000	25,000
Rasket & veneer wks.....	1	240	75,000	125,000
Breweries.....	1	110	167,000	300,000
Candy factories.....	10	60	100,000	325,000
Carriage & wagon wks.....	6	100	50,000	100,000
Cider and vinegar.....	3	15	15,000	35,000
Cigar factories.....	9	10	60,000	250,000
Cotton factories.....	1	645	\$600,000	\$700,000
Cotton & wool pick'rs.....	1	15	10,000	30,000
Cott n ties etc.....	4	20	10,000	25,000
Envelope & box facty.....	1	65	30,000	75,000
Fertilizer works.....	13	14	5325,000	4,285,000
Flour and grist mills.....	8	275	150,000	700,000
Foundries & iron wks.....	3	200	250,000	300,000
Ice factories.....	2	25	75,000	100,000
Job printing and.....	8	180	325,000	450,000
Lead binding.....	1	10	40,000	130,000
Lead factories.....	1	65	40,000	75,000
Mattress fa. tories.....	5	35	27,000	70,000
Mattress fa. tories.....	2	90	60,000	250,000
Men's clothing.....	1	5	20,000	35,000
Oil refinery.....	1	170	75,000	150,000
Prioritary estab'nts.....	35	130	40,000	100,000
Rice mills.....	3	30	60,000	150,000
Sa. dleries & harnes-s.....	9	25	40,000	70,000
S. il & awning fact'ies.....	2	320	350,000	850,000
Saw and blind factories.....	5	257	350,000	850,000
Saw and lumber mill's.....	8	70	25,000	175,000
Ship and boat yards.....	3	15	75,000	60,000
Soap and candle facty.....	1	150	70,000	650,000
Soda water etc.....	22	150	100,000	175,000
Underwear factories.....	3	5474	\$9,589,000	\$14,272,000
Totals.....	189			

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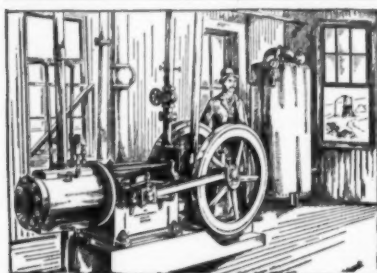
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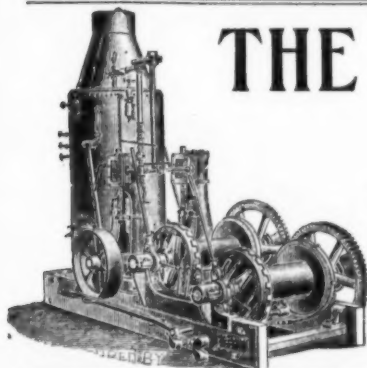
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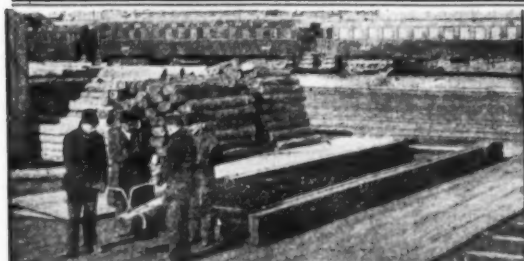
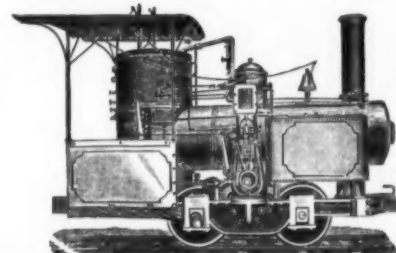


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A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER.

VOL. XXX No. 2
WEEKLY.

BALTIMORE, AUGUST 7, 1896.

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BALTIMORE, AUGUST 7, 1896.

The "Kansas City and Gulf Edition" of the Manufacturers' Record.

The interest that is felt throughout the country in the development of trade between the West and the South, and especially in the growth of foreign trade through Southern ports, is shown by the attention that has been aroused by the announcement that the Manufacturers' Record will shortly publish a Special Kansas City and Gulf Edition, with a view to showing how the concentration of railroad and business interests at Kansas City, looking to the Gulf as the outlet for foreign shipments, is destined to bring about a very marked development of the Southwest—a great increase in manufactures, in immigration, in agriculture and in foreign trade. Many letters are being received showing the general interest in this subject.

Messrs. W. W. Dusen & Bro., large land-owners of Crowley, La., who have been instrumental in bringing 10,000 or 12,000 Western people to Louisiana, under date of August 1 write as follows:

"We notice the communication from Mr. Stilwell, of the Kansas City, Pittsburg & Gulf Railroad, in regard to a Special Kansas City and Gulf Edition. You are to be congratulated upon the good work that is being accomplished by the Manufacturers' Record. I am of the opinion that such an edition as you have decided to issue will prove of untold benefit to Kansas City and the outlet on the Gulf. The development of this 'Port Arthur' scheme, with its direct communication with so great a Northern centre as Kansas City, will certainly be felt beneficially all along this Gulf coast region."

A well-known gentleman, writing from San Antonio, says:

"I saw today in the newspapers that you had closed a contract to publish a Special Kansas City and Gulf Edition, following the suggestion on that line made by Mr. Stilwell, president of the Missouri, Kansas & Texas Trust Co., and vice-president of the Kansas City, Pittsburg & Gulf Railroad. That notice in our local papers has inspired this letter. For some time I have been posting myself as to the merits of that enterprise. I am con-

vinced, after securing all the information at my command, that that will be one of the greatest trunk lines in the country, and that the country it traverses is on the eve of unprecedented activity and development. This railroad has brains and money behind it. Its policy is liberal, public-spirited and sagacious. With a wonderful variety of soil, climate and production revealed along its line, this company is certain to attract both immigration and capital. The Ozark mountains has one of the finest climates in the United States. Its wonderful attraction as a health resort will soon become manifest under the energetic management now in control of this section. * * * Hence I expect to make my future home there and establish a combined fruit and stock farm."

Why Not Have a Southern Institute?

The Manufacturers' Record has received a prospectus of the Massachusetts Institute of Technology, of Boston, and with it a circular coming from what is termed the "Southern Club," composed of Southern graduates of this notable school. The circular states that as the demand for engineers is now becoming more urgent throughout the South, it is the intention of the Club to assist every deserving Southern youth who desires to attend this school, and that with this end in view it is intended to ultimately establish a scholarship, available to Southern youths. The Club desires those who wish to investigate the matter of attending this school to address any of its members, including Lawrence L. Gaillard, 45 East Bay, Charleston, S. C.; C. E. Fleming, 156 East Main street, Spartanburg, S. C.; George O. Haskell, Savannah, Ga., and Granville Smith, 2137 L street N. W., Washington, D. C.

While the Manufacturers' Record takes pleasure in giving publicity to this very creditable matter, we cannot but emphasize what we have advocated before in these columns—the necessity for a similar school in the South. The wonderful progress which the South has made in industrial pursuits emphasizes the urgent necessity for such a school in the near future. It is needless to say that there are plenty of young men who are energetic and intelligent in the Southern manufacturing centres who only need a technical education to make them experts in textile and other industries. The South has some excellent technical schools, but none on the same comprehensive plan as the Massachusetts Institute of Technology. It needs some great institution like this located at a central point accessible to the entire South. It should have a great technical school, ranking in equipment and endowment with the best in the country. An institution of this character would stimulate the industrial interests of the whole South. Is there not some wealthy citizen of the South who will undertake the endowment of such a school? No one could do a greater service to his country.

An Interview About Japan.

The remarkable progress of Japan and the opportunities that it presents for the development of trade are interestingly told in this issue by Mr. Hayakawa, counselor of the Ministry of Finance, Tokio. In a special interview with a representative of the Manufacturers' Record, Mr. Hayakawa points out the great increase in railroad building and in textile interests, showing how these industries are opening up markets for cotton, cotton-mill machinery and railroad equipment and supplies. In the eager efforts of American manufacturers to extend their foreign trade, the conditions now prevailing in Japan should receive careful attention.

A Bounty on Agricultural Exports Proposed.

We publish in this issue a letter from Messrs. Sperry, Jones & Co., a banking firm of Baltimore, advocating the payment of a bounty on all agricultural products exported. They believe in offering protection directly to the farmer through a bounty on exports. The Manufacturers' Record invites discussion on this subject.

The Manufacturers' Record, of Baltimore, a non-political, industrial and commercial journal of high character, devotes forty-five pages of its last week's issue to the city of New Orleans. In a carefully-prepared and well-written series of reports and sketches it sets forth convincingly the present greatness and vast future promise of the Southern metropolis. The exposition is an attractive one; in some respects almost bewildering. It must be confessed that some of the facts revealed are of a character to put the most progressive Northern cities upon their mettle. The city which stands at the ocean gateway of the Mississippi valley is coming up magnificently to the possibilities of her situation, and is displaying an energy and enterprise well worthy of one of the foremost centres of American civilization.

Among these papers is one by Mr. Worthington C. Ford, chief of the bureau of statistics at Washington, on the foreign commerce of New Orleans. From this it appears that that city has the third largest export trade in the United States, being surpassed only by New York and Boston. Cotton, of course, is the principal item, but a great business is also done in oil and oil-cake, lumber, corn, wheat and tobacco. The position of New Orleans with reference to the great producing region of the Mississippi valley, and also with reference to the Mexican and Central and South American ports, gives abundant promise of the future maintenance and increase of this trade.—New York Tribune.

This hearty endorsement of New Orleans by the New York Tribune is one illustration of the value of the work that the Manufacturers' Record is doing. Its statements as to the South and its resources and progress are widely copied in this country and abroad. In this way millions of readers are constantly learning about the South.

Mr. L. W. Hammond, secretary of the Peck-Hammond Co., Cincinnati, Ohio, in a letter to the Manufacturers' Record, says:

We notice the announcement you make in regard to special issues of the Manufacturers' Record during the next twelve months,

and can see the advantages of the same to the South. Your journal is certainly doing a great work for that section, and we think is one of the best-edited journals in the United States.

The Need of Technical Training in the South.

Technical training is essential to the advancement of the industrial interests of the South. It should receive the thoughtful study of everyone interested in the prosperity of this section. A personal letter to the editor of the Manufacturers' Record presents the case so strongly that we take from it the following extracts:

For the past eight years I have been intensely interested in the subject, and I am satisfied that the South will be handicapped in her industrial development until this work is systematically carried on. Along certain lines, such as the manufacture of cotton cloths, the cottonseed-oil industries and the development of the furniture trade, there will be rapid and marked success, but there are other industries, which the South ought to excel in, that must be dependent for success upon trained and intelligent supervision.

The local conditions are such that it is imperative that native superintendents should be secured. This will insure general development, while only local success can be obtained by bringing the general managers from the North.

Except in the State of Maryland, I believe that the hope of technical education for the next twenty years lies in the direction of the development of the land-grant colleges. It requires liberal expenditures to establish these technical institutions, and public sentiment in the several States has not yet been educated to that point which will sustain the respective State legislatures in granting generous appropriations. The expenditure by a single Commonwealth of an amount less than \$20,000 is trifling with the question.

In the city of New York there is a Southern colony, which is powerful as a social factor, rich in wealth and superior in intelligence, and it ought to be possible in some way to induce the most successful of this community to modestly endow at least one institution in every State. I am satisfied that one earnest man could get the South Carolina contingent in New York to do that work for his native State. It ought not to be a difficult matter to induce residents of other Commonwealths to follow suit. There are three men in the South who ought to take this question into consideration—Dr. C. W. Dabney, Jr., of Tennessee; Dr. J. M. McBryde, of Virginia, and Dr. H. C. White, of Georgia. These educators possess executive ability to a remarkable degree, and thoroughly realize the importance to the South of the development of the mechanic arts and sciences. With your periodical to support them, the interest of the Southern press could be aroused to the necessity of enlarging the work of the scientific institutions.

The following act, passed February 26, 1879, should be made known to the trustees and governing board of every Southern scientific institution, and, if necessary, a caucus of leading Southern senators should take place to see that the law was carried out:

"For the purpose of promoting a knowledge of steam engineering and iron-ship building among the young men of the United States, the President may, upon the application of an established scientific school or college within the United States, detail an officer from the engineer corps of the navy as professor in such school or college; provided, that the number of officers so detailed shall not at any time exceed twenty-five, and such details shall be governed by rules to be prescribed from time to time by the President; and provided further, that such details may be withheld or withdrawn whenever, in the judgment of the President, the

interests of the public service shall so require."

The detail of a dozen sincere, earnest and capable naval engineers, receiving compensation from the national government, and by virtue of their position in condition to talk plainly to the trustees of their respective institutions, would do great things for technical education in the South, while at the same time the nation would be benefited by having the nucleus of a naval engineering reserve educated in every Commonwealth.

During the past ten years about a dozen naval engineers have been detailed for duty at various Southern scientific institutions, and the commendatory letters now on file at the Navy Department will show that these men did something more than perfunctorily discharge their duty. In order that the full measure of their services might be secured, the details must be successive, and upon the departure of one naval engineer another must be ordered to take his place.

You will understand that these men would not be rivals of the professors of mechanical engineering now doing duty at the various institutions. They would be loyal colleagues who would supplement the work of the civilian professors.

In connection with the scientific institutions for the training of men as leaders, the several States should make appropriations for the support of schools of industrial trades for the benefit of the colored youth. There are various trades which must eventually be turned over to the control of the negro artisan, and the wealth of the South will be increased by developing from the field hands and city laborers artisans for a particular class of work. With these men receiving high wages and steady employment they would soon become small property-holders, and the distribution of this wealth would cause a conservative colony which would make much for peace and prosperity.

Sporadic work is not wanted. The movement should extend throughout the South. Secure the detail of a dozen men from the naval engineering corps, and you will have a band of men whose direct commercial service would be worth at least \$50,000 annually. These officers would not be content to carry on routine duties. * * * Their earnestness of purpose would cause some public man in each Commonwealth to champion their cause.

PROTECTION FOR THE FARMER.

A Baltimore Banking Firm Advocates a Bounty on All Exported Agricultural Products.

SPERRY, JONES & CO.,
Investment Securities.

Baltimore, Md., August 3.
Editor Manufacturers' Record:

Our recent letter to the republican candidate for the Presidency stated that he had it in his power to enunciate such a doctrine as would meet the present crisis, and we believe that if so met the question of a money standard will adjust itself without legislation in that particular interest, and without the creation of the worst feeling of sectionalism that has prevailed since 1860.

Let us seek to cure the cause before we cure the effect. Mr. McKinley is the best exponent of the doctrine of protection, in which we also believe. For twenty-five years we have lived under this system, which has made our country great and glorious. The \$2,400,000,000 savings banks deposits, mostly owned by the laboring men in the Eastern and Middle States, and the enormous growth of manufacturing, are a sufficient argument on this point. Believing, therefore, as we do, in protection, we want to see the whole people benefited by it. We want a tariff on imports so high as will absolutely protect our home industries of every character from competition from abroad, thereby building up these industries and giving the laboring man a full day's pay for a full day's work, and it is the highest tribute to the American laborer when we say he only asks this. Give him this and he will take care of the rest.

But while we have been legislating for our manufacturing industries, what about the farmer? While we have seen the manufacturing States prosper under the

doctrine of protection, what of our agricultural States? They are the people who are crying loudly for a change, because they get nothing for their product and are going daily from bad to worse. We may preach honest money by the year to these people, and their answer will be, "we have honest money now. We have seen every other section but ours thrive, and we have furnished a large part of the political power which has enacted laws to make prosperity. You have preached honest money and protection to us in the past, and we have given you loyal support, and we are today the only class in all this country who have not been benefited by it. Our product is worth less and our farm land depreciates in value year by year, and we must live. We are willing to try free silver—free anything—in the hope of bettering our condition."

This reply has been made to us hundreds of times, and we confess to the justice of it. We believe it to be the cause of our present financial depression, and the free-silver agitation one of the results. Correct the cause, and the result will correct itself. We cannot afford to have this country placed upon a silver basis, neither can we afford to ignore the cause which threatens it.

Our agricultural products form by far the largest part of our trade and commerce. The census of 1890 shows that there were in the United States 4,565,000 farms, containing 623,000,000 acres and covering 973,000 square miles, with an annual product valued at \$2,500,000,000, and it is safe to assume in the six years succeeding the census there has been an increase in these figures of 10 per cent.

In 1895 our exports aggregated \$800,000,000, and 70 per cent., or \$560,000,000, were agricultural products, and for 100 years past agriculture has furnished the bulk of our exports, and consequently furnished the bulk of the money brought into this country; and as these people have voted a tax on themselves to protect our manufacturers, to pension our soldiers, to subsidize our shipping and to provide a bounty for the sugar-planter, it is time for us to do something for them or stop "class legislation" altogether and let the whole country take care of itself and experiment with itself until we are lowered to the plane of Mexico and the South American countries.

Now, what is to be done? We have prospered under protection, and must continue it. We have a currency recognized the world over as honest, and, except the agricultural element, were until recently a prosperous and contented people. Protection has brought this about. Let us extend it to all the people, and not to a part. Let us have an import duty on everything manufactured in this country sufficiently high to prevent foreign competition, and then pay the farmer to a fair extent so much per pound or per bushel on his product for everything exported from this country. This is equitable all around. It guarantees the manufacturer immunity from competition and enables him to pay the laborer good wages. It will enhance the value of farm land and its product, and will enable the farmer to pay better wages to the farm hand. The bounty feature has been tried and approved by legislation and law in this country with the sugar-planter, and by subsidies to the shipping interest; why not try it for awhile with the farmer?

It has been urged that the farmer has no part in exportation, and that, after all, the middleman at the point of shipment would get the bounty. We do not assume that every farmer will become an exporter direct any more than does a manufacturer. Both employ middlemen. It makes no difference who gets the bounty so long as it is reflected in the price of the prod-

uct at the hands of the producer. The present prices of wheat, corn, cotton and other farm products are regulated not alone by home consumption, but by foreign demand. An exporter of wheat or cotton, for instance, bases his buying price from the farmer for what he can get for it at Liverpool. He is in the business for his profit, and so long as he can get more than he pays he will continue in business. On the other hand, the farmer must sell at ruling prices. He must send his surplus stock abroad, and is thus at the mercy of his foreign competitor; but he can do this and live if he is assured of a bounty on his export. This bounty practically reimburses him for his contribution to the protection and prosperity of the manufacturer, and places him on a plane with the competitor abroad, who, on a free-trade basis, is enabled to sell his products at a lower price. The more home product sent out of the country the less there will be to sell in it and the more money brought to us from abroad. Suppose that it does stimulate production. It will also stimulate exportation and prices, and instead of exporting gold we would export our product and bring back gold. It is absurd to call this class legislation, paternalism, etc. It is business, pure and simple.

The method of doing it is a matter of detail which can be worked out as well as all governmental details are worked out, the main question being that the export producer will get the benefit. It is the principle we want to establish.

We have been asked how much this will cost the country. We know it will be cheaper than free silver and sectionalism. The one will breed disaster, the other war. Our lawmakers don't stop to figure on the cost of the river and harbor bill, nor of our pension appropriation of \$143,000,000 per annum.

In 1890 our import taxes were \$225,000,000; in 1895, \$147,000,000, and all collected under the theory of protection to home industries. Now, let us take the same liberal view in the farmers' interest.

Suppose we pay him a bounty 10 per cent. on the shipping price of agricultural products exported. These export products for 1895 amounted to \$560,000,000; 10 per cent. on that is \$56,000,000. This means, at ruling prices, \$3.50 per bale on the 5,000,000 bales of cotton exported from the South, or \$17,500,000. It means about six cents per bushel on wheat and four cents per bushel on corn exported from the West, say, \$15,000,000. It means, further, \$23,500,000 to the exporter of cattle, meats, dairy and other products, and the only cost to the public will be the revision of our tariff on imports to the basis of 1891.

Looking, therefore, to the interest of the manufacturer, the merchant, the capitalist, the laboring man and the farmer, we propose:

1. A bounty on agricultural products exported, to the extent of 10 per cent. of their market value at point of exportation.
2. A revision of our tariff on imports to at least the basis of 1891, including the restoration of wool and lumber to the duty list.
3. A suppression of immigration for five years and a total suppression of pauper immigration.

We have already argued the first and second of these propositions, and only add that, by the restoration of the tariff of 1890-91 we can pay at least 10 per cent. on agricultural products exported, and we now come to—

PROTECTION FOR LABOR.

In the foregoing, ideas have been suggested looking to the extending over the agriculturists of the protection which has made our manufacturing interests so great. We shall now plead for the work-

ingman, the mechanic and the laborer, both skilled and unskilled.

Before we can intelligently pass on this feature of protection it will be necessary to briefly review the legislation governing immigration.

From 1783 to 1820 it is estimated that 250,000 immigrants entered this country. Between 1820 and 1840 immigration was almost entirely from Great Britain and Ireland. Germany contributed 1,500,000 between 1840 and 1890. Between 1885 and 1895 over 5,000,000 were admitted, and from 1820 to 1894 more than 17,000,000 were added to our population.

"An act to encourage immigration," without any restrictive features, became a law in July, 1864, and marked the first legislation on this subject. This law was repealed March 30, 1868. A new law was enacted August 3, 1882, which imposed a per capita tax of fifty cents on each passenger not a citizen of the United States. Since then this tax has been increased to one dollar.

This law provided for the exclusion of undesirable immigrants, such as foreign convicts, lunatics and others liable to become a charge on the public, and for their deportation at the expense of the owners of the vessels on which they came.

The first alien contract-labor law was passed February 26, 1885. Under this act it became unlawful for "any person, company, partnership or corporation, in any manner whatsoever, to prepay the transportation or in any way assist or encourage the importation or immigration of any alien or foreigner into the United States under contract agreement, parole or special, expressed or implied, made previous to the importation of such alien or foreigner to perform labor or service of any kind in the United States," made such a contract void and enacted a penalty against the party contracting with the alien, also against the master of the vessel who knowingly transports aliens under contract, and exempted from liability under the law professional actors, artists, singers and persons employed strictly as personal or domestic servants.

The law passed March 3, 1891, defines the class of immigrants to be excluded as follows: "All idiots, insane persons, paupers or persons liable to become a public charge; persons suffering from a loathsome or dangerous disease; persons who have been convicted of a felony involving moral turpitude; polygamists, and also every person whose ticket or passage is paid for with the money of another or who is assisted by others to come unless it is affirmatively and satisfactorily shown on special inquiry that such person does not belong to one of the foregoing excluded classes or to the class of contract laborers excluded by the act of February 26, 1885." This act also provided that "nothing in this act shall be construed to apply to or exclude persons convicted of a political offense," or "as prohibiting any individual from assisting any member of his family to immigrate from any foreign country to the United States for the purpose of settlement here."

The Stump law of 1893 was the first to provide for the foreign inspection of immigrants, but this only partially protects us, as, under the "relative" clause in the act of March 3, 1891, quoted above, it is possible for the contractor of labor to bring in his hordes of Italians, Poles, etc., and deliver them in bodies varying from tens to hundreds, to such point in this country as they may be needed. This he does for so much per head, paid him by the employer and deducted from the wages of the laborers.

Immigrants lower the scale of wages, lessen the cost of production, increase the profits, help to concentrate wealth in the hands of the multi-millionaires, corrupt

our politics, for the reason that in fourteen States they are allowed to vote upon the simple condition of declaring their intention of becoming citizens and residing in the State for a period varying from four to twelve months.

We recommend such legislation as will prohibit, or practically stop immigration for five years; as will compel all aliens entering this country to produce satisfactory evidence of moral, physical and financial worth; as will restrict the right of franchise, making it necessary that every foreigner shall live in the United States for twenty-one years before being eligible to vote, and we believe that an agitation which will bring the facts herein stated clearly before the minds of the people will do more good than all the tons of sound-money literature it is proposed to disseminate.

SPERRY, JONES & CO.

TRADE WITH JAPAN.

Southern Cotton and Other Products Find Ready Market There--What a Representative of the Bank of Japan Tells the Manufacturers' Record.

[Special Cor. Manufacturers' Record.]

Washington, August 4.

One of the most distinguished parties of foreigners which has visited America for a long time is now making a tour of the United States. The members of the party are S. Hayakawa, of Tokio, Japan, government inspector of the Bank of Japan and counsellor of the Ministry of Finance; T. Yamamoto, chief cashier of the Bank of Japan, and S. Iwanaga, manager of one of the principal steamship lines in that country. These officials have been in America several weeks, and have been investigating its resources and its commercial and industrial conditions, with the view of making an elaborate report on their return to their own country. Within a few weeks the Oriental Steamship Co., a Japanese corporation, has determined to establish a line of vessels between Seattle, Wash., and Japan. Another company has also been formed, called the Dinto Kizen Kaisha, with a capital of 2,000,000 yen. This company intends placing vessels in service between Portland, Ore., and Tokio. As one of the visitors referred to is the manager of one of these steamship lines, the main object of the tour of the United States scarcely needs explanation.

A representative of the Manufacturers' Record had an interview with Mr. Hayakawa while the party were in this city, in which the latter gave some interesting views on the relations of the South to Japan and the prospects for increased trade between that section and his country, in addition to referring to the future relations of the United States in general with Japan. "While we have only time to stop at a few of the principal cities," he said, "we have endeavored to obtain as much information as possible about the Southern States, realizing that from that portion of your country come products which find a ready market in Japan, and which can be handled by the steamship lines now being promoted by our own people. We have visited San Francisco, Chicago and Washington, and will remain in Philadelphia and New York for a few days before leaving for Europe. I have had the pleasure of conversing with American gentlemen who are thoroughly informed as to the conditions of not only the whole country, but especially of the Southern States, and believe that I have gathered a large amount of data which will be very valuable to our financiers, merchants and shipping companies. The great variety and extent of the resources of America is, indeed, surprising to me and my associates. The

United States is a great nation, and but few of the Japanese people have any conception of its greatness. It is probably unnecessary to state that an extremely friendly feeling prevails toward your country among us, and that all Americans who desire to increase trade relations with Japan will find hearty encouragement. At present England and Germany may be considered the strongest competitors of the United States in the Japanese market. Germany especially has made remarkable progress within a few years, and has secured a large amount of the business which formerly was controlled by British merchants. But there is no reason why the United States should not enter this market on almost equal terms, and obtain a very much larger portion of the business than its merchants now enjoy."

When Mr. Hayakawa was asked as to the feeling towards American cotton among the Japanese manufacturers, the question led to a discussion of the textile interests in Japan, in which he said: "From what I have learned of the cotton produced in your Southern States, I see no reason why our textile importers should not receive the bulk of their supply from America. The fabric is especially adapted for our purposes, and in my opinion is superior to much of that which comes from the Indian fields. The great drawback heretofore has been the lack of adequate transportation facilities, and I believe that with the two new steamship lines in operation, your shippers will be enabled to place the cotton in our markets at a price which will enable them to successfully compete with the Indian cotton. It is unnecessary to say that the textile industry has made very rapid progress in Japan within a comparatively few years, and there is no indication that it will be retarded in the near future. While a large number of mills have been erected, many more are projected, and in course of construction, as capitalists have no hesitation in making liberal investments in this direction. Thus far, the machinery is supplied principally from England and Germany. In fact, the German machinery seems to meet with much favor. I do not know how the quality of the American textile machinery compares with that from Europe, but if your manufacturers can supply a grade equally as good they will find a very extensive market for years to come in Japan. I can assure you there is no prejudice whatever against the use of American machinery in cotton mills or other manufactories in our country."

Relative to the railroad situation, Mr. Hayakawa stated that he had made special investigation in this direction. "There are," he said, "companies representing over \$60,000,000 capital now engaged in various railroad projects in the country. Thus far the railroad building has been confined principally to lines between our seaport towns and short distances in the interior. The government, however, is encouraging railroad building in every possible way, and has offered such liberal inducements that the investments of capital have been, as you will infer, extremely large. The companies represented by the \$60,000,000 as yet have done but little railroad building, and consequently Japan offers truly a great market for railroad material of every kind, especially steel rails. As yet, no rails are manufactured in Japan, although the government is now building several foundries and expects to establish in connection with them steel plants capable of turning out the heaviest rails in use in England and America. Locomotives, passenger, freight and other coaches are all imported, and probably will be for several years to come. Thus far the European

makers have had a monopoly of the market, but as in the case of cotton and other products, the American people will have a much better opportunity to compete for this business with the establishment of the steamship lines to which I have referred. It is true we have extensive deposits of iron ore in Japan, and they are being mined to some extent, but lack of the necessary machinery has prevented the development of this industry, and here is another opportunity for the makers of mining machinery to introduce their goods."

When asked what he thought were the American products which would find the most extensive market in Japan, Mr. Hayakawa replied that corn, cotton, iron, machinery, rails and petroleum might be called the chief products. Although Russia supplies a large quantity of the petroleum now used in Japan, the American oil is very popular, and can be introduced to a much greater extent than at present.

The Nicaragua canal is a matter in which the Japanese officials have taken a deep interest, and the representative of the Manufacturers' Record was informed that they had investigated the cost, the probable time it would take to complete this waterway and the benefits which would accrue to their country from its construction. Still another line of steamships is contemplated between Japan and a portion of the Southern Pacific coast of the United States. Some port south of San Francisco is to be selected if a suitable harbor can be secured. Referring to the canal as lessening the distance between Asiatic ports and the Gulf and South Atlantic States, Mr. Hayakawa stated that when it was completed, the Japanese shipping companies would doubtless establish at least one if not more lines direct to some of the Gulf ports by way of the canal. He is strongly in favor of it from a business standpoint, and intimated that if fully explained to Japanese capitalists it might receive very substantial aid from that country. There is at present in England about \$175,000,000 to the credit of the Japanese government, being principally the indemnity paid by China as a result of the late war. Mr. Hayakawa was asked if any portion of this sum could be voted by the government in aid of the canal project, but expressed the opinion that it could not. He also added that the Bank of Japan, which he represents, could give moral encouragement to the enterprise if it was considered practicable, and in this way attract the attention of individual investors to its merits, although the bank itself could not advance funds.

The Manufacturers' Record learns that the steamship service referred to between the Pacific coast and Japan will be of a high standard. One line will put on two steamers of 5000 tons at once, to be increased in the near future. These vessels have been built but a few years, and combine high speed with all modern improvements.

D. ALLEN WILLEY.

Mr. C. Lasker has opened and commenced working his coal mines near Elgin, Texas. The coal is said to be of excellent quality and semi-bituminous in variety, and the vein being worked at present is four and one-half feet thick, with indications of growing thicker. The mine has recently been equipped with a complete modern mining plant, constructed by the Wright & Adams Co., of Quincy, Ill., and as soon as the mine is properly opened out an output of 800 tons daily will be possible.

The city of Miami, Fla., has been incorporated and officers elected as follows: J. B. Riley, mayor; Young E. Gray, marshal, and John M. Graham, clerk.

The Oil and Gas Fields of Texas.

[Special Cor. Manufacturers' Record.]

Waco, Texas, July 28.

Among the resources of Texas, her oil and natural gas have been almost entirely overlooked. A few efforts toward development in a small way, and backed by little capital, have been made. These have gone far enough to demonstrate that the fields are worthy of operation on a larger scale.

Along the northwest border of the central black waxy-land belt of the State runs a well-defined fissure of volcanic origin. Southeast of this break or fissure in many places, oil oozes from crevices of the rock in very considerable quantities. In one place I have seen the oil in summer run over the hard-rock bottom of a dry branch for fifteen or twenty feet, and form a mass of asphaltum after evaporation by the sun's heat. The winter floods would carry it off, but by the end of the next summer another mass would take its place. Here the early Texan got his axle grease. In another place this asphaltum is found so pure and free from grit that the children use it for chewing gum.

Water wells drilled in this region have shown small pockets of oil at from ten to 300 feet from the surface. A well-driller, who has worked all his life in the oilfields of Pennsylvania and West Virginia, claims that, in drilling an artesian well, he struck a twenty-five-barrel-per-day pocket at 300 feet; that he insisted on the proprietor letting him move his machinery and convert it into an oil well. The latter refused, directing him to go on for artesian water, as that was what he was after. Deep water already secured at Galveston harbor (reached by pipe lines over a level country) puts the oil of this field in easy access to the markets of the world.

The natural-gas field is further to the southeast, and promises the richest investment to be found in the State. As in the case of the oil, but feeble effort has been made to develop it. Just before the financial troubles commenced in 1890, a company of limited capital drilled a few shallow wells, with very promising results. At 150 feet a vein of gas-bearing sand some eleven feet thick was struck that yielded a fine volume, but a light pressure. Under advice of the superintendent of an Indianapolis gas company, a well was started for the third vein of sand, which this expert said would be found at about 1500 feet, and would furnish all the pressure needed. An inexperienced driller "lost the hole" at 1000 feet, and money becoming tight, work was stopped, and has never been resumed. At 450 feet a second vein was struck, stronger than the first, but as it was the third they were after, this was shut off. Below this second vein there were unmistakable evidence that more gas was deeper down. This field is in reach of several cities where the high price of fuel assures a profitable market for natural gas. An expert from Pittsburg, Pa., tested this gas and pronounced it a superior article, and of petroleum origin. The shallow water wells in the neighborhood are at times so strong of petroleum as to make the water too nasty to drink. In others the water is too salt for ordinary use.

The question naturally arises in the reader's mind, why don't local capital take hold? I answer, Texas has but little surplus capital, and the possessors of that little are too well satisfied with investments in 8 and 10 per cent. vendor lien notes to bother with developing any industry. The paper-shaver is our modern capitalist, and in the development of a country he amounts to minus infinity.

JOHN L. LYLE.

RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

Railroad Building in the South.

The Daily Stockholder, a New York paper, which is usually well informed relative to the railroad situation, has recently published an article which must have been prepared with but little thought. Under the title of "More Railroads," the Stockholder refers to a summary recently published on new roads in the country, and seems to have selected the South as its special point of criticism. It refers to the projects in all the Southern States, and comments as follows: "There seems to have been nothing backward about the promoters of new roads for the South and Southwest. That we have not reached the limits of laying tracks in the waste places of the country is evident from the facts now adduced. Times may improve and opportunities occur for a raid upon unsuspecting investors, but they may do all this and still the proof may be lacking that the projected roads are anything more than schemes to line some people's pockets at the expense of those of some other people."

The Stockholder does not seem to consider the fact that as far as transportation facilities are concerned, the South is much more deficient than any other section of the country. As to the term "waste places," it is needless to say, the proportion of waste land in this section is no greater, and possibly not as great, as in many of the Western and even New England States, when one considers the large number of abandoned farms in the latter section. But why the South should be selected for this criticism is somewhat remarkable. A glance at any railroad map of the United States will show how comparatively few lines are in operation in this section today. Portions of many States have no railroad facilities whatever for localities fifty and sixty miles in width, although they are quite thickly populated and have abundant resources which would create an extensive local traffic.

One who reads the article infers that most of the roads are visionary schemes, when it is a fact that the contrary is the case. We do not dispute that in the South, as well as in other parts of the country, many schemes are promoted which remain on paper only, but at the same time the Manufacturers' Record believes that more railroad projects of importance are being carried out in the South today, in spite of the business depression, than in any other section of the country. By the term carried out we mean actually under construction in sections which are thickly populated and productive, and in which are cities and towns actually in need of additional transportation facilities. The Charleston & Macon Railroad, in South Carolina, is backed by capitalists of the highest standing in Charleston, and is now being built by a reputable firm of contractors from New York. Baltimore capitalists are building a 60-mile railroad across the peninsula between Chesapeake bay and the Atlantic ocean, which will probably be completed this year. The Mobile, Jackson & Kansas City Railroad, an enterprise which is 180 miles in extent, traverses a country that at present is practically destitute of transportation facilities. It is being built by a construction company composed of responsible parties, and we are informed that a contract has been signed by foreign capitalists to take an extensive bond issue to finance it. The Kansas City, Pittsburg & Gulf system, which is expected to be completed be-

tween Kansas City and the Gulf of Mexico this year, is certainly no visionary scheme. Already 400 miles of this road have been completed, and the entire system, 769 miles in extent, will probably be in operation this year. It is financed by one of the leading trust companies of Kansas City in connection with a wealthy Holland syndicate and some of the largest capitalists in Philadelphia and Boston—men who are thoroughly familiar with that section of the country and are not liable to be duped by irresponsible promoters.

Take, for instance, the projected line between St. Louis and Fort Smith, known as the St. Louis, Siloam & Southern Railway. This projected road of 300 miles is intended to open up a country twice as large as the State of Massachusetts, without a mile of railroad in it—a country already having 200,000 people more than ten miles from any line of road. Of this territory the St. Louis Globe-Democrat has said:

"It embraces the southern half of Missouri and the northern half of Arkansas. It is an empire in natural resources. Barring the precious metals, more natural wealth is within these boundaries than in any other region of like size in this country. All of the metals, all of the woods, all of the stones and clays are there. To these are added climate and soil which furnish the most successful conditions for all of the fruits of the temperate zone. Water-powers in number and strength exist beyond the comprehension of those who have not seen them. Draw a line from St. Louis to Little Rock, from Little Rock to Fort Smith, from Fort Smith to Kansas City, from Kansas City back to St. Louis. You have described an area which is capable of supporting more people in comfort than any other part of the United States of like size, and you have a region in which more people are living today without railroads than anywhere else in the country."

Moreover, the value of this line would be vastly increased by reason of its becoming by far the shortest route between St. Louis and Fort Smith, and thus on to the Southwest.

Is it a visionary scheme projected by irresponsible promoters to talk of building a railroad through such a territory as this? Is it not, on the contrary, an enterprise that is actually needed, and one that the conditions of the country and the business waiting for transportation absolutely demand? Is it not also an opportunity for the profitable investment of capital such as can scarcely be found unless it be in other similar undertakings in the South?

And then consider the projected railroad up the Guyandotte river in West Virginia. Here is another undertaking for which there is an actual need and the assurance of profitable operation. It will open up a country 200 miles long, tapping a region inexhaustibly rich in coal and timber—a region destined to furnish even more traffic than the Norfolk & Western or the Chesapeake & Ohio now receives from their coal districts. Moreover, it is a region in which coal-miners are anxious to operate, many substantial firms having guaranteed to begin heavy operations upon the building of the railroad.

These are illustrations of the opportunity offered by the South for good railroad investments. There are still others presented in this section for the profitable building of railroads—railroads that will find an abundance of business from the day they are opened, and to talk of railroad business being overdone in the South is the sheerest absurdity. That there are parts of the South in which there is greater mileage than business justifies is true, but that in no way detracts from the value of gilt-edged new enterprises. Some

of the old lines were built without relation to the industrial development of these days. Some, as already stated, would have continued profitable and would still be paying large dividends but for the operations of men who have sought to accumulate vast personal fortunes by the manipulation of railroad securities rather than to build up the roads by legitimate business operations. If half the tales of rascality in regard to the way in which some of the railroads of the South were handled in times past are true, it is no wonder that they went into bankruptcy. But shall this section be deprived of much-needed new roads on that account?

The Stockholder comments upon the large number of Southern roads which have gone into the hands of receivers. We do not deny that many of them have gone through a reorganization process, but it is a well-known fact that a majority of those that have been in receivers' hands have been forced into bankruptcy on account of being overstocked and bonded by speculators, and often by New York speculators, to such an extent that it was utterly impossible for them to earn their fixed charges. This has been proven by the Central of Georgia, which was a prosperous institution until Wall-street wreckers got hold of it, and which, under its reorganization on a business basis, has not only earned its fixed charges, but a surplus in addition, according to its last report. It is all very well to criticize the building of useless roads in the United States, and there is no question but what many lines have been built where they are not needed, but there is ample room in the South for more railroads than now exist, and they will find an abundance of business when prosperity once more returns to this country.

Air Motor a Success.

A dispatch from New York states that the compressed-air motor which is now being tested on the Third Avenue Street Car Co.'s line has been pronounced successful by experts who are conducting the test. It is what is known as the Hardie motor, and operates a car at the speed of from four to fifteen miles per hour, as desired. The car is equipped with the McPherson air brake, and it is stated that the motorman has no difficulty in controlling it at any rate of speed. The reservoir containing the compressed air had a pressure of 2000 pounds to the square inch when the car started on its trip. This pressure was reduced 50 per cent. at the end of eight miles. The reservoir is calculated to hold enough air to operate a car a distance of fifteen miles.

The Manufacturers' Record learns that the Central Passenger Railway Co. of Baltimore has been considering the same style of motor as used on the Third Avenue street-car line in New York, and that it is possible these motors may be used in the near future. As already stated in this paper, the Central Railway line is about to build seventeen miles of extensions in the Eastern suburbs, and it is understood that the compressed-air motors will be used on this portion of the system first, and eventually applied to all the Central Railway lines, if pronounced practical. There is no doubt but what the use of compressed air is attracting much attention among street-railway companies throughout the country besides those in Baltimore and New York. The Wheeling Suburban Co., of Wheeling, W. Va., has been watching the progress of the New York experiments, and it is now stated that compressed air may be used upon this line, which has just been completed in the suburbs of Wheeling. Anton Reyman and several wealthy manufacturers are the directors in this company.

A Great Contract for Electric Transmission.

The first step towards the actual transmission of the power of Niagara Falls over any considerable distance has been made, and Buffalo will be the first city to benefit from it. By November 4 next the cars of the Buffalo Railway Co. will be driven by the electricity generated at the power-house by the side of the great cataract, and the transmission of its power over a long distance will have become an accomplished fact.

Contrary to expectations, the system of transmission is not the two-phase, but the three-phase system developed by the engineers of the General Electric Co., the advantage in favor of the latter lying in the fact that the transmission can be effected over three wires, whereas in the two-phase four wires must be used to convey the same amount of power. The cost of the fourth wire is saved by the use of the three-phase system.

The contracts were made between the Cataract Construction Co., supplying the electricity, and the General Electric Co., and between the latter company and the Buffalo Power & Conduit Co., controlling the supply and distribution of the Niagara power in Buffalo, and the Buffalo Railway Co. The contracts provide for all the apparatus and machinery necessary for the transformation of, transmission, transformation down, conversion and delivery of 1000 horse-power to the overhead wires of the Buffalo Street Railway system.

The contract with the Cataract Construction Co. covers three of the air-blast type transformers. These will be the largest transformers ever constructed, and will step up the Niagara 2200-volt two-phase current to either 11,000 or 22,000 volts three-phase. Any two of the transformers together will deliver 2500 horse-power; the third is a spare one. It is the intention of the Cataract Construction Co. to commence transmission operations at 11,000 volts, and later to increase the capacity of their transmission system by increasing the potential to 22,000 volts. The transformers will be designed and insulated to withstand the latter pressure. A complete system of air-blast apparatus is also to be provided for cooling these transformers, as well as a marble switchboard with all necessary instruments for controlling their operation.

The pole line will be erected by the White-Crosby Co., and will have capacity sufficient to transmit 40,000 horse-power. This line will run from the transformer house at Niagara Falls along the two-mile line road near the track of the New York Central and Erie Railroads, will cross the creek at Division street, and from Tonawanda to the Buffalo city line will follow the canal banks.

For transforming the power down and converting it into that suitable for street-railway purposes, the Power & Conduit Company purchase four static transformers of about 360 horse-power each, and two 500 horse-power rotary converters. The transformers will reduce from the line potential of either 11,000 or 22,000 volts to 400 volts, at which voltage the three-phase current will be turned into the rotary converters, and then converted into direct railway current of 550 volts. These transformers and converters will be set up in the Niagara street power station. The latter will be compound wound, and will operate in multiple with the steam-driven generators, supplying the balance of the power necessary for the operation of the railway system. They will be of the ironclad type, with steel frames, with collector rings for the three-phase current at one end and a

commutator for the direct current at the other. They will have six poles, and will run at 500 revolutions per minute, and are similar to that placed in the Niagara power-house to furnish current to the Buffalo & Niagara Falls Railroad.

Work will be begun at once, and current will be transmitted from Niagara to Buffalo before winter sets in. It cannot be doubted that this is but the first step to a much larger use in Buffalo of the power of Niagara Falls, and that having once begun to deliver power into that city, the Niagara Power Co. will find a large demand rapidly rise.

A Southern Connection.

A dispatch from Louisville, Ky., states that the Chicago & Eastern Illinois Railroad has purchased the Chicago, Paducah & Memphis line, extending from Alton, Ill., to Marion, in the same State. This purchase may have much significance in its relation to the railroad situation of the South.

The Chicago & Eastern Illinois has a direct line between Chicago and Evansville. It connects with the Chicago, Paducah & Memphis at Mount Vernon, and by a connection of the latter road, now being built, will obtain an entrance into Memphis, Tenn., where it will reach with several Southern roads. The Chicago & Eastern Illinois Railroad is one of a few entering Chicago which have made special inducements to secure Southern trade. Its officers have endeavored in every way to encourage the trade relations between Chicago and the South, and the report of this sale simply confirms the statement which was made in the Manufacturers' Record some time ago, that it would endeavor to obtain an independent line in the South, with a view of securing a share of this business.

Carolina, Tennessee & Ohio.

A dispatch from Wilmington, N. C., states that rapid progress is being made with the Carolina, Tennessee & Ohio line, now being constructed between Wilmington and Southport. This road will be twenty-six and one-fifth miles between the terminal points. About six miles have already been graded, and several bridges are now being built. The railroad is intended for hauling coal from Wilmington to Southport, and at the latter point it is said that docks and coal chutes are to be constructed, which are to be completed some time this year. The harbor of Southport is such that deep-draught vessels can enter it, and it is expected that it will become a coal station for coastwise and foreign steamships. The officers of the railroad company are J. E. Challenger, Philadelphia, president; Stephen Green, Philadelphia, vice-president; James Calhoun, Albany, N. Y., secretary and treasurer; H. H. Dougherty, Newark, N. J., general superintendent.

A Railroad Mystery Solved.

A section of the Carolina Central division of the Seaboard Air Line, near Wilmington, N. C., has attracted much interest among railroad experts for some time by reason of peculiar noises made when trains passed over it. The section is about six miles long, and the passage of trains over the rails was accompanied by a squeaking and grinding noise, the cause of which has only been recently discovered. On account of the mysterious sounds this section of the track had the reputation of being haunted among the residents of that section of the State. Recently Vice-President St. John, of the Seaboard Air Line, had the track carefully examined by experts, and it was found that owing to defective measurement when constructed the gage was slightly out of standard, and that the rails

were not in exact line with the balance of the track. The six miles have been relaid, and since then the noise has ceased.

Gas Motors on Street Cars.

A recent issue of the Manufacturers' Record referred to a gas motor which has been applied to a street car by Thomas C. Pole, of Washington. Mr. Pole has calculated the cost of his motor as compared with the cable and other systems, and he gives the following figures: The cost of operating a cable-car line, exclusive of repairs, is estimated at eighteen cents per car per mile, while to construct the system costs \$100,000 per mile. The underground electric system costs \$140,000 a mile, while the cost of operation is fourteen cents per car per mile. The overhead trolley line costs from \$15,000 to \$50,000 per mile for the road, while the cost of operation is ten cents per car per mile. By using the gas-motor system, the inventor claims that it costs but \$5000 to equip a mile of line after the rails are laid, while to operate the car costs but two cents per car per mile. The Pole system, it is stated, is similar to that in use in Dresden, Germany, which is giving much satisfaction.

Changes on the C. O. & S. W.

The control of the Chesapeake, Ohio & Southwestern by the Illinois Central system has caused a number of changes to be made among the officials of the former road. The principal officers of the Illinois Central will occupy the same positions with the Chesapeake, Ohio & Southwestern. W. A. Kellond is transferred as assistant general passenger agent from New Orleans to Louisville, with jurisdiction directly over the Chesapeake, Ohio & Southwestern. William Murray is appointed division passenger agent of the Illinois Central at New Orleans. W. L. Smith is to be assistant freight agent of the system at Memphis, and S. G. Hatch, assistant passenger agent at Cincinnati. W. J. Harahan is to be superintendent of the Grenada division.

To Test the Order.

The recent order of Postmaster-General Wilson, requiring railroad companies to pay postage on their regular correspondence transferred by train, is to be resisted by the Lake Shore & Michigan Railroad Co., one of the Vanderbilt roads, and one of the wealthiest corporations in the country. The superintendent of the Lake Shore has issued an order to its employees to carry mails as heretofore, without postage. If prosecuted by the government for violation of the law, it is intended to make a test case. The result will be a matter of much interest to the other railroad companies throughout the country, as millions of dollars are involved.

A Friction-Geared Locomotive.

What is known as the Holman friction-geared engine is now being tested upon the South Jersey Railroad. The inventor claims that the locomotive can attain a speed of 100 miles an hour with a train of at least three cars attached. During the first test, made near Cape May, twelve miles were covered in eleven minutes, although the locomotive drew two ordinary passenger coaches. It is stated that the engine worked very smoothly. The amount of coal consumed by the Holman patent is less than that by an ordinary locomotive.

Railroad Notes.

James Templeton has been appointed soliciting freight agent for the Southern Railway Co.

W. H. Tayloe has been appointed pas-

senger agent for the Southern Railway Co. at Norfolk, Va.

J. D. Rahner has been appointed passenger agent of the Florida East Coast Line, succeeding Joseph Richardson.

Henry P. Eager, who recently resigned from the Chattanooga Southern, will be manager of the Chattanooga Car Service Association.

C. W. Sedgewick has been appointed freight agent of the Galveston, La Porte & Houston Company, with headquarters at Galveston.

A. C. Knapp, formerly associated with the Queen & Crescent system, has been elected secretary of the Southern States Passenger Association.

H. S. Trout has been elected president of the Roanoke Street Railway Co., succeeding S. W. Jamison, who has been selected as general manager.

J. T. Slater has been appointed general passenger and freight agent of the Chattanooga Southern Railway, with headquarters at Chattanooga, Tenn.

J. F. Montgomery, of Taunton, Mass., has purchased the Florence Belt Railroad line. The road is operated as a terminal line in the suburbs of Florence, Ala.

The Louisville & Nashville Railroad Co. has awarded the contract to Dodson & Co., of Atlanta, to build its new freight depot at Montgomery, Ala., the building to cost \$32,000.

It is reported that the Plant Railroad & Steamship Co. has determined to extend its service to Fernandina, and will operate a line of vessels between Fernandina, Brunswick and the North.

Mr. P. J. McGovern has resigned his position as assistant superintendent of the Southern States Freight Association at Atlanta, and has associated himself with the Southern Railway Co.

The Gulf & Interstate Company has purchased several passenger coaches in New York, and is now operating passenger trains over its road between Galveston harbor and Beaumont, Texas.

The Houston & Texas Central Railroad Co. is experimenting with an electric headlight for its locomotives, and it is probable that all of the engines on its road will be equipped with this light.

The city of Cincinnati has voted against the proposition of leasing the Cincinnati Southern road, with a view of selling it to the Southern Railway Co. and the Cincinnati, Hamilton & Dayton.

General Manager Bretz, of the West Virginia Central & Pittsburgh Railway, advises the Manufacturers' Record that nothing will be done at present about the extension of this line from Cumberland, Md., to Hagerstown.

H. M. Emerson has been appointed general freight and passenger agent of the Atlantic Coast Line. Mr. Emerson has been assistant agent of the company, and his promotion is a well-merited compliment to his ability and energy.

H. F. McFarland has been appointed general freight agent of the Galveston, Houston & Henderson Railroad, with headquarters at Galveston. He was formerly associated with the Chesapeake, Ohio & Southwestern Railroad.

The reorganized Houston Electric Railroad Co., of Houston, Texas, has filed its articles of incorporation, with a capital stock of \$2,000,000. Geo. C. Smith and A. N. Parlin, of Boston; T. M. House and A. H. Hill, of Houston, are among the directors.

The sale of the Port Royal & Augusta Railway has been fixed for the first Tuesday in September, at Beaufort, S. C., by order of Judge Simonton, of the United States Court. Thomas Martin, of Beau-

fort, has been appointed master for Beaufort county.

Receivers Cowen and Murray, of the Baltimore & Ohio Railroad Co., have been authorized to make an arrangement with the Consolidation Coal Co. for the handling of the latter's business and to furnish them with 200 cars for the transportation of its coal from the mines to the market.

The excellent showing made by the Atlanta & West Point Company, recently published in the Manufacturers' Record, has been commented upon considerably in the Southern papers. Among them is Moody's Magazine of Medicine, which gives a brief history of the line and a sketch of its energetic president, Mr. Geo. C. Smith.

The Metropolitan Railway Co., of Washington, has completed its underground electric conduit system, and it is now in operation. By the use of this system all wires and poles above ground are dispensed with, also much of the noise incident to the operation of the trolley car. Forty-six cars are in service over twelve and one-fifth miles of road.

The Pennsylvania Railroad Co. has increased its train service between points in Western Maryland and Baltimore. Ten passenger trains daily are now operated through Frederick, Md., and a train which makes the run between Frederick and Baltimore in two hours has been put on. The change is of much benefit to people in that section of the State.

A dispatch from New Orleans states that the New Orleans & Western Company finds already that it must have increased terminal facilities and motive power at Port Chalmette, owing to the amount of business which it is now handling. The improvements will include several new wharves, also an addition to its electric-light plant and another compressed-air locomotive, which has been ordered from H. K. Porter & Co., of Pittsburgh.

The annual report of the Baltimore & Lehigh road for the year ending June 30 shows the gross receipts \$131,478.60, and the net earnings \$33,917.66. The fixed charges and cost of betterments, deducted from the net earnings, leave an income of \$22,970.28, or 2.7 per cent. on the capital stock. This is an unusually good showing, considering the difficulty of operating the line in its present narrow-gage condition. John Wilson Brown, of Baltimore, is president of the company.

More Trade for Galveston.

The merchants of Galveston, Texas, have determined to secure more trade from the interior of that State, and to this end have sent out circulars informing merchants that all who purchase goods of any member of the Galveston Board of Trade to the amount of \$500 or over will have their railroad fare for the trip to Galveston and return refunded. The Board of Trade is composed of some of the principal merchants and manufacturers in Galveston.

Don't Get Frightened

Just consider a moment. Here are great mill properties in this country, magnificently equipped and ably managed. There are some 70,000,000 of people here who need the product of these mills every day of their lives, and who will always have the money to supply their common needs. Hence, whether we have silver or iron or diamonds for money, the necessities of our vast population will oblige these mills to keep running, in all probability at a profit. Therefore, keep your eyes open for bargains, and not closed in quaking fear of something that is largely imaginary.—Boston Commercial Bulletin.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

Views of Cotton Manufacturers.

Galveston Rope Co., Galveston, Texas: "You ask our opinion on business outlook. Better all go fishing until November, then elect McKinley and secure prosperity, or Bryan, and get all the ists and isms, demoralization, mistrust, anarchy, revolution, mobs, riots and H—I broke loose generally for four years. Straighten out the tariff so the Canadian mills can't bring binder twine in free, while it costs us 12½ per cent. to place our product in Canada."

Great Falls Cotton Mills, Falls City, Tenn.: "The production of cotton is greater than the demand; also of all classes of cotton goods. Stop all the factories for six or twelve months and put a big tariff on imports, and then you will see goods go up."

Sterling Cotton Mills, Franklinton, N. C.: "Sound money and high tariff."

Objects to More Cotton Mills.

THE JOHN P. KING MFG. CO.,
Augusta, Ga., July 28.

Editor Manufacturers' Record:

I have your recent circular asking me to give my views what is needed to bring greater prosperity to textile interests.

I enclose you three articles taken from the Southern Industrial News, published at Charlotte, N. C., July 15. All of them are misleading in their general tendency to people who are not thoroughly posted in manufacturing in the South. Such articles as these are what induce people who do not know what is required to make a successful mill in the South, to build mills not favorably located and surrounded, to make money. You will see the article in regard to the mill at Clover claims to have made 30 per cent. profit, and they say they will make 15 per cent. this year. The next article claims to have made 18 per cent., and the other one is bragging how we are getting the business away from the East. They all try to show that the South is reaping great profits in the manufacturing business, when the fact is that only mills favorably located and get very cheap power and near good cotton markets are able to make money, and sometimes lose money. If you could do anything to put a stop to the building of mills in the South, especially those run by steam, it would be a great help to the prosperity of those engaged in textile interest.

Men who have machinery to sell are anxious to sell it to people, whether they make money from its use or not. It is natural for anyone to try to boom his own business, but often in doing so they injure the parties that buy the machinery and use it.

I want to instill in the minds of the people that they are often misled by seeing glowing statements of profits made by mills, without inquiring into the conditions under which that mill has made money, and then go and build mills differently situated where it is impossible to make money.

CHAS. ESTES, President.

President Estes is a very successful cotton manufacturer, but the Manufacturers' Record does not believe that it is wise

for the South to stop building mills, notwithstanding his advice. Of course, some mills are badly located and some are built by men without any knowledge of the business. These may not succeed. But the cotton-manufacturing industry must go forward. It may have its ups and downs, its periods of prosperity and its periods of adversity, but through them all it must be pressed steadily forward. Great care should, however, be taken to encourage the building of such mills only as have every natural advantage for success.

Advice as to Buying Machinery.

Philadelphia, Pa., July 28.

Editor Manufacturers' Record:

In their enthusiasm to get ahead in new enterprises in the South, the people of that section must not forget that mechanical skill and manufacturing art are accumulated by slow growth. We cannot become experts in any industry in a day, and the great manufacturing centres are what they are through many long years of patient toil and study. The mere purchase of machinery will not suffice to make us mechanics or artisans. Men who are good mechanics or artisans become, from the very nature of their calling, slow and conservative. The man who works at the bench or the loom becomes slow and careful because of the nicety of the operation he has to perform, for he cannot handle the fine threads of the warp as if they were cables, nor fit the finely-adjusted parts of a tool with a rasp.

And this is true also of the management of manufacturing enterprises. The competitions of trade make it necessary that the utmost care be given to the details of expense and cost of material. And these niceties of economy, both in the waste of material and its cost, go far towards settling the question of profits. These can only be learned by experience, and experience is always a slow teacher.

We think, therefore, it would be well for our Southern people who are contemplating the starting of new enterprises to start in a small way at first, and buy machinery as their knowledge of the industry in which they wish to engage accumulates, and they can then buy more intelligently and buy what the development of the trade in their hands requires. There are many parties who buy a large amount of machinery just because they want to engage in a certain line of business, and this without any actual experimental knowledge of the requirements of the trade, and find afterwards that they have not gotten what they really need. This could almost always have been avoided by going slower at the start. The manufacturers of the North and in the old manufacturing centres of Europe do not buy in this large way till by absolute knowledge they know what they want. Dealers in machinery, that are not afraid of the test of their devices, will always sell sample lots of machinery, so as to give the purchaser the opportunity to develop his business.

Can Negro Labor in Cotton Mills Be Made Profitable?

Concord, N. C., July 15.

Editor Manufacturers' Record:

The question of whether the negro in the South can be profitably employed in textile mills seems to be engaging no little attention, and to this question our answer is emphatically yes, without fear of contradiction. The negro is endowed with natural intellectual ability, as are other races of mankind, and only await the opportunity of displaying it before the world, dispelling all possible doubt as to his talent and worth in any pursuit of life.

While it is very true he has figured very conspicuously in other pursuits where he was allowed fair play, why not in this? I believe that if allowed the same opportunity as other races, he would do quite as well as they, and would within a very brief period give entire satisfaction, as he is today giving in very many of the industrial pursuits. The Southern negro is possessed with the same natural, God-given intellect that his white brother is, capable of ascending the heights of the great plain to which the ingenuity and skill of the other races have carried them. He has not allowed his time to pass away unimproved, as is supposed by a great many who have never been South, and can only judge by what they have heard, and very often they failed to hear of him as he really is. He has taken time by the forelock, and utilized his talent to the very best advantage, and now is ready, able and willing to discharge with neatness and dispatch any and all kinds of work which he may be called upon to do. He is not idle and ignorant, as some of the readers may have heard, but, on the contrary, are fairly educated, property-owning, self-respecting, industrious people, as those who are here must confess, and to those who are not here a visit through the South will be sufficient to substantiate the argument. To our friends North or South, East or West, who anticipate the erection of cotton mills or any other industry with a view of employing negro labor, let me say your investment will certainly prove to be paying and prosperous if the prosperity of all enterprises where negroes are employed can be taken as evidence.

To prove the truthfulness of the statement, I am now laboring very earnestly to have a textile mill erected right here in Concord, even before the close of the present year, to be operated by colored labor. The subscription books are now open to the friends of the enterprise, and are meeting with encouraging success, as can be proven by informing you that one Southern white gentleman has subscribed \$2100, and up to the present our books will show subscriptions amounting to \$10,000, and a tract of land upon which to locate the mill, containing 100 acres, more or less.

W. C. COLEMAN.

Textile Notes.

A \$10,000 stock company has been organized at Spartanburg, S. C., and applied for charter. It is proposed to establish a knitting plant at once.

The McColl Manufacturing Co., of McColl, S. C., has applied for increase of capital stock from \$50,000 to \$150,000. It is stated that the company contemplates erecting an additional mill.

The Monbo Manufacturing Co., of Monbo, N. C., has recently awarded contracts to S. Morgan Smith, of York, Pa., for furnishing two 51-inch vertical turbines for use in the company's new mill, now building.

The new South Carolina Braiding Co., of Cheraw, S. C., recently established, has already commenced to add more machinery. Baling, finishing and other equipment will be purchased; E. A. Palmer, president.

Messrs. E. G. Richmond, R. W. Barr, Garnett Andrews, J. S. Bell, G. W. Davenport, L. W. Llewellyn, C. D. Bartow and W. B. Swaney have organized the Chattanooga Knitting Mill Co., of Chattanooga, Tenn., for the purpose of establishing a knitting mill. It is proposed to manufacture half and full hose. Messrs. Andrews and Llewellyn, noted above, are to assume the active management of the enterprise.

The Whitney Manufacturing Co., of Whitney, S. C., will double its capacity

when the additional building, now erecting, is completed. Machinery has been ordered, including pickers, cards, slubbers, frames and spinning, spoolers and 600 horse-power engine and boilers. The plant will be one continuous building, equipped with 20,000 spindles and 618 looms, operated by steam and water combined.

Superficial Examination of Ores Free

The Manufacturers' Record, seeking to turn attention to the mineral resources of the South and to aid its readers in the intelligent investigation as to what may or may not be of value, has arranged with Mr. Charles Catlett, chemist and geologist, of Staunton, Va., to make superficial examinations of samples without charge. Such samples will be reported in the Manufacturers' Record, with a word of explanation as to probable or possible value. Such an examination is necessarily superficial, and does not comprise a quantitative analysis, which, where desired, is charged for.

The following directions should be observed:

Samples should be sent to Charles Catlett, No. 10 New Court House street, Staunton, Va., with all mail or express charges prepaid. The name and address of sender should be clearly stated on package.

Care should be taken to select an average sample, otherwise the examination will prove of no value. Quite a small quantity will be sufficient.

A postal card or letter to Mr. Catlett, with a word of explanation as to mode and exact location of occurrence, would assist in giving value to the examination.

H. M. Justice, Hendersonville, N. C.: No. 1, specular iron; No. 2, ditto. These would be valuable only in very large quantities.

W. E. Spence, Knoxville, Tenn.: No. 1, iron ore, poor quality; No. 2, galena, good quality; valuable in quantity; may carry silver; No. 3, pyrrhotite; not valuable at present.

John H. Hall, Montpelier, Miss.: Galena; valuable in quantity; may carry silver.

John H. Hill, Montpelier, Miss.: Galena. Valuable in quantity.

W. E. Spence, Knoxville, Tenn.: Iron ore, probably containing considerable manganese and silica.

J. F. Stone, Way Cross, Ga.: Silica, containing a little kaolin. May make good filtering disks.

N. J. Bader, Llano, Texas: 1. Serpentine rock. 2. Impure asbestos mineral. 3. Impure graphite. 4. Molybdenite or sulphide of molybdenum. 5. Sandstone, containing several copper minerals. 6. Fluoride of calcium. 8. Good quality red hematite.

H. A. Martin & Co., Fayetteville, Ark.: Slate. No value.

B. F. Wood, Evinston, Va.: Manganese wad; good quality.

Thomas Sheak, Franklin, N. C.: Finely divided silica carrying small amount clay; probably make good filtering disks.

T. R. Jones, Cartersville, Ga.: Fair quality manganese ore; market value can only be determined by quantitative analysis.

The ninth annual edition of "The Blue Book" textile directory has been issued. This well-known volume contains a complete list, with full particulars, of all the cotton, woolen, silk, jute, flax and linen mills, dyers, bleachers and print works, supply companies, etc., in the United States and Canada. A notable new feature of this 1896-1897 edition of "The Blue Book" is the patent index, enabling one to turn immediately to any company or firm desired. A complete directory of textile-mill supplies has also been added, constituting a valuable feature. "The Blue Book" can be obtained from the publishers, the Davison Publishing Co., 401 Broadway, New York city; price office edition, \$3; pocket edition, \$2.50.

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

The Market for Cottonseed Products.

New York, N. Y., August 4.

Yet another drop must be announced as having transpired in the cotton-oil market. The result has in part met the views of holders, as a very considerable quantity of oil has changed hands, or has been contracted for early delivery during the week. Stocks are thus correspondingly decreased, which circumstance, it is hoped, will prove a helpful factor in placing new oil on the market to better advantage. Under present market and forthcoming crop conditions, however, it is difficult to see how anything like satisfactory prices can introduce the new season's oil. It is authoritatively reported here that for September and October delivery new crude is on offer on a 14½ to 15-cent basis. Several of the Texas mills have decided to commence milling operations early in the ensuing week, but the price of oil will necessarily depreciate seed values to a point where little if any profit can accrue to the cultivator, which to a greater or less extent will influence the volume of crude material crushed. Lard and tallow are still at a very low ebb, with regard to prices, and it is difficult to see how these and other controlling cotton-oil influences could be more depressed than at this time. Reports are current of the possibility of further heavy sales for export, but nothing of an important nature in this line has come to the surface, excepting toward the end of the week, when a sale of 1000 barrels of prime summer yellow was reported for export at 22½ cents f. o. b., and at the close a further disposition was manifested to purchase at this price, but holders refused to shade 23 cents. It would thus appear as if bottom prices had been touched at last. Prime white and butter oils are slow of sale at the reduced quotations, while off-grade yellow is neglected. Concerning crude, a limited supply only is available, values in this instance being well maintained at former quotations. Receipts are comparatively light, while the aggregated exports reach 5000 barrels, half of which was consigned to Trieste. The closing prices are as follows: Prime crude, 19 to 20 cents; loose at the mills, 15 to 17 cents; off-grade barrelled crude here, 18 to 19 cents; prime summer yellow, 23 cents; off-grade yellow, 22½ to 23 cents; prime winter yellow, 30 to 32 cents; butter grades, 25 to 26 cents; prime white, 25½ to 26 cents, and soap stock, 5c. per pound.

With regard to cake and meal there is very little on offer, and exports have therefore practically ceased. The rapidly-decreasing stocks abroad command fairly good prices, while the prospect of a good demand for new crop products is encouraging. Concerning the light supplies of meal which are shipped to England, it may be observed that efforts are making to educate the English agriculturist in this line. Mr. Wm. Norman, of the well-known Liverpool importing house (Norman & Pigott), estimates the quantity of meal received in England as being only 5 per cent. of the weight of cake, while Germany, on the contrary, prefers the meal.

Mr. R. L. Heflin, of Galveston, vice-president of the Texas Seed Crushers' Association, was in New York recently. By means of a very special process, as explained by him to your correspondent, he has developed a very flourishing trade in meal for the German market.

Cottonseed-Oil Notes.

The Chattanooga Cotton Oil Co. at Alton Park, near Chattanooga, Tenn., will, it is understood, resume operations in about a month.

The Shiner Oil Mill & Manufacturing Co., of Shiner, Texas, recently organized, has now all the necessary machinery for a first-class outfit, and its plant will be in running order by the first of September.

The shipments of cottonseed products from the port of Galveston, Texas, during July were 5641 sacks oilcake for Liverpool, 779 barrels cottonseed oil for Vera Cruz and 768 barrels of cottonseed oil for New York.

The Yoakum Cottonseed Oil Mill Co., of Yoakum, Texas, filed application for charter last week with a capital stock of \$15,000. The company purpose to manufacture cottonseed oil and cottonseed products. The incorporators are Alexander Hamilton, J. W. Bennett, E. P. Canuth, A. G. Wageman and Charles Kessler.

The cottonseed-oil company recently organized at La Fayette, La., opened bids last week for the erection of the cotton-oil factory, and awarded the contract to C. D. Stewart, of Opelousas, for \$5988, being the lowest of four propositions. A very advantageous site has been secured within the city limits, and the contract provides for the operation of the plant by the 1st of October.

The following quotations were posted on the 31st ult. by the cottonseed-product department of the Houston Cotton Exchange and Board of Trade: Choice crude oil for butter oil, 17 cents; strictly prime crude oil, 17 cents; prime crude, 17 cents; off-crude oil, according to grade, 10 to 16 cents; prime butter oil, loose, 20 cents, and prime summer yellow oil, 19 to 20 cents; prime cottonseed cake and meal per short ton, \$13.50 to \$15 f. o. b. mill interior points, according to location.

The market for cottonseed products in New Orleans was dull and lower on the 1st inst., with very little doing. Prime crude oil in bulk, 16 cents; prime summer yellow in barrels, 23 cents; meal, \$17 per short ton; cake per long ton, \$19. Receivers' prices were as follows: Cottonseed, \$8 per ton (2000 pounds) delivered net to the mills; cottonseed meal jobbing at depot, \$17.25 to \$17.50 per short ton and \$19.25 to \$19.50 per long ton for export f. o. b.; cottonseed oil, 19 to 19½ cents per gallon for strictly prime crude; in bulk, 16 to 17½ cents, and 23 to 24 cents for refined oil at wholesale or for shipment; oilcake, \$19.50 to \$19.75 per long ton f. o. b.; foots, 1 to 1½ cents; linters—A, 3½ to 3½ cents per pound; B, 3 to 3½ cents; C, 2½ to 2¾ cents; hulls delivered at 20 to 25 cents per 100 pounds, according to location of mills.

Baltimore to Richmond by Bay Line.

The steamer Virginia, of the Baltimore Steam Packet Co.'s service between Baltimore and Richmond, has been again placed in commission, and is now making trips Monday, Wednesday and Friday, leaving Pier 10, Light street wharf, at 4 P. M. The boat reaches Richmond at 10 A. M. the next day, giving passengers who desire to make the round trip five hours in Richmond for business and pleasure. Returning, she reaches Baltimore at 9.30 A. M. on Sundays, Wednesdays and Fridays. The Virginia is the largest boat ever in service on the James river. She is handsomely fitted and furnished, has steam heat and electric lights, and can accommodate 300 passengers, besides a large freight tonnage. As the fare to Richmond is only \$1 each way, the trip will doubtless prove very popular.

PHOSPHATES.

Phosphate Markets.

Office Manufacturers' Record, Baltimore, Md., August 6.

In the local phosphate market the volume of transactions continues light, with little or no activity. Manufacturers are not in the market to any extent, and orders from out of town are few. The tone of trade at points of production continues much about the same as last reported. In South Carolina shipments coastwise are fair, but the foreign demand for rock is light. Crude rock is quoted \$3 at the mines, hot-air-dried \$3.25 f. o. b. vessel in Ashley river and \$3.45 f. o. b. Charleston city. Ground rock is quoted \$5.50 f. o. b. vessel at city. In Florida shipments of rock from the ports during July were very light, and miners are not disposed to increase the output in the face of a depressed market. There is some work going on in the pebble district, but in hard rock the work of mining is partially suspended at the moment. In charters there are none reported in the local market, and rates are steady. In New York there is a steady inquiry for steamers, and rates are firm and without change. There is a fair business in sail tonnage, and berth freights are steady. The following phosphate charters were reported during the week: A British steamer, 1396 tons, from Port Tampa to Bordeaux with phosphate at 16; a bark, 1059 tons, from Port Tampa to Cartaret at \$2.10; a Norwegian steamer, 2002 tons, from Fernandina or Brunswick to Rotterdam or Hamburg at or about 14/6 to 15; a British steamer, 1101 tons, from Fernandina to St. Louis de Rhone at 15/6, August, and a schooner, 179 tons, from New York to Baltimore with fertilizer at 88 cents.

Fertilizer Ingredients.

The tone of trade is quiet, with no activity in material and the market for ammoniates very steady. The offerings are moderate, and stocks in the West are light. There is no demand from Southern sources. Messrs. Thos. H. White & Co., in their circular for July, say: "Ammoniates have been quiet during the month. The pyrotechnics of the last week of June were not followed by any response in July, and the month ends with a depressed feeling. The bad state of trade generally in consequence of the uncertainty attending the future of the nation's finances is sufficient to account for this." Nitrate of soda is steady, with a fair offering.

The following table represents the prices current at this date:

Sulphate of ammonia, gas....	\$2 30@	—
Sulphate of ammonia, bone....	2 15@	—
Nitrate of soda.....	1 85@	1 90
Hoof meal.....	1 55@	—
Blood.....	—	1 65
Azotine (beef).....	—	1 60
Azotine (pork).....	—	1 65
Tankage (concentrated).....	1 55@	—
Tankage (9 and 20).....	1 50@	1 55 and 10
Tankage (7 and 30).....	15 50@	—
Fish (dry).....	19 00@	—
Fish (acid).....	10 00@	11 00

Phosphate and Fertilizer Notes.

The British steamship Norlands was loading phosphate rock at Fernandina, Fla., on the 1st inst.

The fertilizing works of Daniel Baugh & Sons, of Philadelphia, were almost completely destroyed by fire on the 4th inst. The loss is estimated at \$125,000, said to be covered by insurance.

The bark Olive Thurlow sailed from Port Tampa on the 27th ult. for Cartaret, N. J., with 865 tons of phosphate from the Bone Hill Phosphate Co. Schooner Harry B. Ritter sailed on the 1st for Baltimore with 935 tons of phosphate from the Palmetto Phosphate Co.

The shipments of Florida phosphate rock through the port of Savannah for July amounted to only 2156 tons per

steamship Inverness for Newcastle, England. Shipments previously reported were 37,679 tons, making a total for seven months ending July 31 of 39,835 tons. The British steamship Madeline cleared from Savannah on Saturday last for Hamburg and Harburg having among her cargo 3200 tons of phosphate for the former port.

The shipments of phosphate rock from the port of Fernandina were very light for the month of July, amounting to only 6200 tons, as follows: British steamship Avalon for Geestemunde and Hamburg with 2900 tons by G. Gudehus, and the British steamship Straits of Sunda for Rotterdam with 3300 tons by Arentz & Co. The total shipments from January 1 to July 31, inclusive, amounted to 95,295 tons, of which 6440 tons were pebble, 1636 tons soft phosphate and 87,219 tons hard rock.

It is reported that a very rich find of phosphate has just been discovered in Maury county, Tennessee, a short distance from Columbia. The find is thought to be a solid bed two miles wide and five miles long, the railroad following it almost its entire length. Dr. Swofford, the State geologist, analyzed the new find, and it is said pronounced it the richest that has been discovered in this entire country. Several carloads have been mined, and quite a number were standing on the sidetrack at Columbia ready for shipment.

Cable advices were received in New York last week from Italy that the combination of Sicilian sulphur mine owners that has been in process of formation for some months has been definitely completed, and that the combination will become operative on October 1. On the same date the Italian export duty on sulphur will be virtually removed. As a result of the news of the successful negotiations the price of crude brimstone in New York was advanced \$1 per ton, the market closing at \$20 per ton delivered. The nominal price until recently was \$16 to \$17 per ton.

The phosphate shipments from the port of Charleston, S. C., for domestic ports during the week ending July 31 were as follows: Brig H. B. Hussey for Weymouth, 800 tons; schooner Edgar C. Ross for Baltimore, 600 tons; schooner Annie C. Grace for Mantua Creek, N. J., 890 tons; schooners Adele Ball with 670 tons, and George R. Congdon, 610 tons, both for Barren Island, and schooner Anna L. Mulford for Wilmington, Del., 810 tons. The total shipments of crude rock to domestic ports from September 1, 1895, to July 31, 1896, were 99,986 tons and 7927 tons of ground, against 93,203 tons of crude and 1450 tons of ground in 1894-95.

The shipments of phosphate rock from the port of Punta Gorda for July, as reported by Mr. Albert F. Dewey, president of the Charlotte Harbor Lighterage & Stevedore Co., were as follows: Steamship Gracia for Birkenhead, 3972 tons; schooner Lizzie M. Eells for Mobile, 123 tons; barge Regulator for Pensacola, 1106 tons; steamship Benita for Bristol, 1813 tons, and steamship Teutonia for St. Nazaire and Falmouth, 2802 tons, making a total for the month of 9816 tons. The total shipments since January 1, 1896, amount to 14,298 tons domestic and 32,290 foreign.

The Horrocks Desk Co., of Herkimer, N. Y., has contracted with the Valdenar Leicht Lumber Co., operating near Ashland, Ky., for \$30,000 worth of quarter-oak lumber, to be delivered within the next six months. A report also comes from Pike county, Kentucky, that a New York timber firm has contracted with all the walnut dealers of the upper valley for their entire supply of walnut logs for the coming season. The timber will all be shipped in the log for export to Germany and England.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

Lumber Directory.

Readers of the Manufacturers' Record who may be in the market for lumber of any description are recommended to the directory of Southern lumber manufacturers and dealers which appears among the advertising pages.

LUMBER MARKET REVIEWS.

Baltimore.

Office Manufacturers' Record,
Baltimore, Md., August 6.

There is no improvement in the local lumber market, and conditions prevailing a week ago are unchanged. There is a moderate demand, however, but nothing like activity prevails in any avenue of the local lumber industry. Stocks of air-dried yellow pine are fully ample for the demand, and prices throughout the list are easy. Boxmakers and planing mills have been making some purchases during the week, while builders are also making inquiries for material. In kiln-dried North Carolina yellow pine there is some demand, and prices are steady. White pine is quiet, with stocks ample for all necessities. Cypress is dull, with values easy. In the hardwood line the situation is unsatisfactory at the moment, there being very little local demand or business from out-of-town sources. Advices from Europe, while encouraging to yellow-pine dealers, are not considered so to hardwood men. There is very little being done in exporting, and until trade in foreign centres revives shipments will continue light. The exports of wood and its products from this port in July were as follows: Lumber 3,515,000 feet, logs of wood 3240 and staves 182,000.

The following list represents the prices current at this date:

[The quotations for yellow pine are for cargo lots, and for all hardwoods the figures indicate values for choice car lots.]

VIRGINIA AND NORTH CAROLINA PINE		
5-4x10 No. 2, kiln dried.....	\$16 00@	18 00
5-4x12 No. 2, kiln dried.....	17 50@	18 50
4-4x10 No. 1, kiln dried.....	15 00@	15 50
4-4x12 No. 1, kiln dried.....	16 00@	16 50
4-4 nar. edge, No. 1, kiln dried.....	13 50@	14 00
4-4 wide edge, No. 1, kiln dr'd.....	17 50@	18 50
6-4x10 & 12, No. 1, kiln dried.....	23 00@	24 00
4-4 No. 1 edge floor, air dried.....	13 00@	14 00
4-4 No. 2 edge floor, air dried.....	10 00@	11 00
4-4 No. 1 12-in. stock, air dried.....	13 00@	14 00
4-4 No. 2 12-in. stock.....	11 00@	12 00
4-4 edge box or rough wide.....	7 50@	8 50
4-4 edge box do. (ord. widths).....	6 50@	7 00
4-4 12-inch rough.....	9 00@	9 50
4-4 narrow edge.....	5 00@	6 00
4-4 wide.....	7 00@	8 00
4-4 9 1/2 and 10 1/2 inch.....	8 00@	9 00
Small joists, 2 1/2-12, 14 and 16 long.....	7 50@	8 50
Large joists, 3-16 long & up.....	8 50@	9 00
Scantling, 2x3, 2x4 and 3x4.....	7 50@	8 50

WHITE PINE.		
1st and 2d clear, 4-4, 5-4, 6-4 and 8-4.....	47 50@	48 50
3d clear, 4-4, 5-4, 6-4 and 8-4.....	42 50@	43 50
Good edge culls.....	14 00@	15 00
Good stock.....	16 00@	17 00

CYPRESS.		
4-4x6, No. 1.....	17 50@	19 50
4-4x8, No. 2.....	12 50@	14 50
4-4x8, 16 feet, fencing.....	42 50@	43 50
4-4x8, rough.....	8 50@	9 00
4-4 rough edge.....	8 00@	8 50
4-4 edge, No. 1.....	16 00@	17 00
4-4 edge, No. 2.....	11 00@	12 00
Gulf, 4-4, Nos. 1 and 2.....	28 50@	30 50
Gulf, 6-4, Nos. 1 and 2.....	31 50@	32 50

HARDWOODS—WALNUT.		
5-8, Nos. 1 and 2.....	65 00@	75 00
4-4, Nos. 1 and 2.....	80 00@	90 00
5-4, 6-4 and 8-4.....	85 00@	95 00
Newell stuff, clear of heart.....	85 00@	100 00
Culls.....	20 00@	30 00

OAK.		
Cabinet, white and red. Southern, plain-sawed and good, 1 and 2, 8 inches and up, 12 to 16 feet long, 4-4.....	30 00@	34 00
Quartered white, Western, 1 and 2 quality, all figured, 6 inches and up wide, 4-4.....	53 00@	55 00
Culls.....	10 00@	15 00

POPLAR.		
Nos. 1 and 2, 5-8.....	24 50@	25 50
Nos. 1 and 2, 4-4.....	28 00@	30 00
Nos. 1 and 2, 6 and 8-4.....	32 50@	33 50
Culls.....	13 00@	16 00

SHINGLES.		
Cypr., No. 1 h'rts, sawed, 6x20.....	7 00@	7 50
No. 1 saps, sawed, 6x20.....	5 00@	6 00
No. 1 hearts, shaved, 6x20.....	6 00@	7 00
No. 1 saps, shaved, 6x20.....	5 00@	—

LATHS.		
White pine.....	2 65@	2 70
Spruce.....	2 10@	2 20
Cypress.....	2 10@	2 20

Charleston.

[From our own Correspondent.]
Charleston, S. C., August 3.

The local lumber market has ruled fairly active, with no urgent demand from any particular source. There is a steady movement, however, and the shipments are principally domestic, there being very little foreign inquiry. There is also a fair trade in crossties, and the demand has been quite active during the summer. Among the mills at all points adjacent to this city business is rather quiet, orders at the moment coming in slowly. As to prices, there is no material change, and values for all desirable lumber are generally firm, closing as follows: Merchantable lumber, \$14 to \$16 for city-sawed, \$12 to \$14 for railroad; square and sound, \$9 to \$13 for railroad, \$8 to \$11 for raft; dock timber, \$4.50 to \$6.50; shipping, \$8.50 to \$10.50. There is a good demand for shingles, and prices are steady at \$5 to \$7 per thousand. Among the shipments during the past week the following vessels are reported: Schooner Cora H. Hanson for Providence, R. I., with 405,000 feet of lumber; for New York schooner Florence Randall 450,000 feet of lumber, steamship Iroquois 19,400 feet and steamship Seminole 86,000 feet. The schooner Nelson E. Newbury cleared on Saturday for New York with 540,000 feet of lumber, and schooner Pasadena for Boston with 471,000 feet. The total shipments of lumber and other wood products from this port from September 1, 1895, to July 31, 1896, amounted to 63,607,817 feet to domestic ports and 2,040,685 feet to foreign, making a grand total of 65,648,502 feet, against 69,785,258 feet last year. The freight market is quiet, with rates firm and without material change. Lumber rates to New York are \$4.38 to \$4.50, and proportionately for ties. A schooner, 347 tons, was chartered last week to load lumber at Port Royal, S. C., for Boston at \$4.70.

Savannah.

[From our own Correspondent.]
Savannah, Ga., August 3.

The volume of business during the past week has shown considerable expansion, and there is a steady demand for all desirable grades of material. Advices from milling sections in Southern Georgia are in some cases very satisfactory, while in other districts there is a dull and featureless trade reported. The general situation, however, is by no means as dull as reported. In the exports last month we find Brunswick shipping nearly 10,000,000 feet of lumber, besides crossties, etc., which may be considered a fair business for July. For the next sixty days there is not much business expected, but nearly all lumbermen are of the opinion that the fall trade will open with considerable activity. Prices are very steady, but there seems to be no sign of any immediate advance. The market closes firm at the following figures: Ordinary sizes, \$11 to \$12; difficult sizes, \$13 to \$18; flooring boards, \$15 to \$22; shipstuff, \$16.50 to \$20, and sawn ties, \$10. The shipments of lumber during the past week were as follows: Schooners May Beard for Philadelphia with 576,620 feet; Eliza A. Scribner for the same port with 265,859 feet; Mary L. Crosby with 427,254 feet, and Joseph W. Hawthorne with 477,778 feet, both for Portland, Me.; Ida Lawrence for Baltimore with 364,883 feet, and steamers for New York 628,960 feet. In freights the market is firm, with rates unchanged. From this and nearby ports in Georgia the rates are \$4.25 to \$5.50 for a range including Baltimore and Portland, Me.; to the West Indies and Windward rates are nominal; to Rosario, \$12 to \$13; Buenos Ayres and Montevideo, \$10 to \$11; to Rio Janeiro, \$14. Steamer rates to New York and

Philadelphia are quoted \$7, to Boston \$8 and Baltimore \$5. The following charters are reported for the week: A schooner, 529 tons, from Savannah to Portland with lumber at \$4.87½; a schooner, 376 tons, from Savannah to New York with lumber at \$4.50, and crossties at 14½ cents; a schooner from Savannah to Baltimore at \$4.50, coal out from Philadelphia on private terms; a schooner, 339 tons, from Savannah to Philadelphia at \$4.25, and a schooner from Savannah to New York at \$4.50, cement out from Rondout at 12 cents.

Jacksonville.

[From our own Correspondent.]
Jacksonville, Fla., August 3.

During the month just closed there has been a very satisfactory volume of business recorded at this port in lumber and other wood products. The lumber shipments for the month of July exceeded those for the month of June by over 3,000,000 feet. There has been quite an active demand for all desirable grades of lumber, and prices have been very steady. A number of vessels are due this week to load cargoes of lumber, and those now in port are nearly all ready to clear. The saw mills here and at Palatka are all running on full time, and have orders sufficient to keep them going for some time to come. The exports of lumber to domestic ports during July were 8,596,778 feet of yellow pine, and to foreign ports 240,209 feet, valued at \$3484.88, cypress lumber 275,000 feet, shingles 26,100 bundles and 815,800 in bulk and crossties 13,000. For the corresponding month in 1895 the exports coastwise were 5,915,800 feet of yellow pine and 595,000 feet of cypress. Foreign shipments were 422,237 feet of yellow pine and 16,400 bundles of shingles. There are a number of vessels now loading lumber here and at Palatka, and others are due to arrive. The business of the current month bids fair to equal July. The following vessels are now loading: Schooners Tortugas for Biscayne, Priscilla Scribner for Philadelphia, Eva Danehower and Flora Rogers. The steamer Algonquin cleared on Saturday for New York with 250,000 feet of lumber and 3000 bundles of shingles among her cargo. Freights are firm, with a moderate offering of tonnage and rates unchanged. The following charters are reported: A schooner, 445 tons, Jacksonville to Philadelphia, \$4.37½; a schooner, 391 tons, Jacksonville to Fall River at \$4.75, and a schooner from Fernandina to Port Spain on private terms.

Pensacola.

[From our own Correspondent.]
Pensacola, Fla., August 3.

The month of July closed upon a fairly active market here, both in lumber and timber. The volume of trade during the month was fairly satisfactory, and the situation generally encouraging for future shipments of material. The advices from the British market are more encouraging in regard to pitch-pine timber, and the demand good for marketable dimensions. Stocks of timber in Europe are said to be unprecedentedly low, that is, of good specification and quality. The local market during the present week has ruled steady to firm, with a fairly active demand and holders disposed to remain firm in their views. A few sales of sawn timber were made during the week at 11½ cents, and one sale of Ferry Pass stock, consisting of 1500 pieces, at the above figure. Among the shipments during the past week the following vessels were reported: Bark Levi Andrews for Boston with 500,000 feet of lumber; steamship Mayfield for West Hartlepool with 350,000 superficial feet of sawn timber and 864,000 feet of lumber; steamship Illiria for Trieste with 13,600 cubic feet of hewn timber, 51,000 cubic feet of sawn timber and 900,000

superficial feet of lumber; steamship Fullham for Aarhus and Elsinore with 83,914 cubic feet of timber and 263,000 feet of lumber; steamship Ethelberga for Havre with 239,000 superficial feet of sawn timber and 1,078,000 feet of lumber, and steamship Henrietta H. for Amsterdam with 3758 cubic feet of hewn timber, 156,000 feet of sawn timber and 1,093,000 feet of lumber. Freights on lumber and timber remain steady. Rates for United Kingdom or Continent 90/ to 92/6 for large and 95/ to 100/ for small vessels; for River Platte, \$12 to \$12.50, \$2 form, and for Rio Janeiro, \$13.25 to \$13.50 net. The following charters are reported for the week: A schooner to Santos and a schooner to Boston, both on private terms.

St. Louis.

[From our own Correspondent.]
St. Louis, Mo., August 3.

The month has opened with a somewhat better lumber market, and conditions in nearly every branch of this industry are improving. The scarcity of orders, it seems, has reached the lowest point, and the dullness of midsummer is giving way to a better demand in every direction. In yellow pine the situation is decidedly better, and millmen report a very satisfactory volume of orders during the week. Stocks of yellow pine at all the country yards are light, and, as the season is approaching for improvements, the demand is likely to be quite pronounced during the fall months. Prices are still very low, with no probable advance in the near future, while stocks at all the mills are accumulating, but with the anticipated demand they are yet not excessive. There is a good trade doing in white pine, and some orders are now coming in from country dealers. There is a fairly active city trade in white pine, while prices are steady, with a narrow margin of profit. In the hardwood market business has been unusually dull, but a slight improvement has marked transactions during the week, and a number of inquiries have come to hand which will likely result in considerable actual business. It is expected that furniture factories will soon resume business, and in other directions manufacturers are beginning to move. There is a better demand for dry plain red and quartered white oak. Cottonwood is in fair request, and a good fall business in this line is expected. In poplar there is some demand for good grades, which are scarce, with a large supply of common stocks. Ash, walnut and other woods are all moving as usual at this period of the season, with no material change in prices. The sash, door and blind trade is still very dull.

Beaumont.

Beaumont, Texas, August 1.

Last week's improvement has been barely maintained, and this is all that can be said. One week ago, when my last letter was written, the prospects for a good crop were never better in the history of the State; now they have changed considerably. No rain has fallen for several days, and while this would not have amounted to anything in the ordinary course of affairs, still, the heat has been so oppressive and the hot winds so destructive that the cotton prospects are considerably below par. Many dealers report that cotton is opening rapidly, and in several places is being marketed. Therefore, until it is known just what the crop is likely to be, no intelligent forecast of what the fall lumber trade will be can be made.

A call has been issued by President Mallam, of the Texas and Louisiana Lumbermen's Association, for a meeting to be held in Houston on next Saturday, the 8th inst. It is not stated in the call what the meeting is to be held for, but it

is probably one of the regular meetings of the lumbermen, held to exchange views and size up the situation.

Export news is still very uninteresting, nothing of any consequence having developed in this branch during the last week. Mr. Wm. Rudolf, member of the firm of W. S. Keyser & Co., Pensacola, is in the city today, looking into the Darlington cargo, which goes to London with the yard stock previously mentioned, and incidentally discussing with the manufacturers the chances for their taking future business. Mr. Keyser will remain in the city a day or two longer, and it is not known as yet what the manufacturers will do with him.

Mr. A. Young, president of the Warren Land & Lumber Co., took a run down to Sabine Pass Thursday to look after matters connected with some export lumber which it has been recently sawing.

Mr. S. F. Carter, of the Emporia Lumber Co., was in town again during the week.

Mr. D. K. Newsum, who has been out in the State in the interest of the Texas Tram & Lumber Co., returned home yesterday morning. Mr. Newsum reports the prospects for business during the fall as fairly good if the cotton crop is not hurt by the present stifling hot weather.

J. A. Bentley Lumber Co.'s mill at Zimmerman, La., is reported as running regularly now. This mill has been built about a year, but heretofore has not been running with any degree of regularity.

Mr. J. F. Keith, vice-president of the Texas Tram & Lumber Co., spent a couple of days during the week at Sabine Pass, looking after the loading of the steamship Darlington for the Consolidated Export Lumber Co.

The lumber business in this section is very quiet this week, and there is nothing of interest to report.

B. S. WOODHEAD.

Lumber Notes.

The shipments of lumber from the port of Brunswick during the month of July amounted to 9,273,000 feet, and cross-ties 129,576.

The exports of lumber from the port of Baltimore during the month of July were 3,515,000 feet, of logs 3240 and staves 182,000.

It is stated that the Lookout Lumber Co.'s plant at Chattanooga, Tenn., will be rebuilt at once. The work of clearing away the rubbish is now in progress.

The total shipments of lumber from Fernandina, Fla., for July were 3,668,000 feet to coastwise ports and 1,279,000 feet to foreign ports. Shipments of cross-ties amounted to 20,840.

The Craig Furniture Co., of San Antonio, Texas, was chartered last week, with a capital stock of \$30,000. The incorporators are C. M. Williams, R. B. Craig and W. E. Ware, all of San Antonio.

A fire broke out in the large warehouse and manufactory of the Crescent Furniture Co., of St. Louis, last week. The flames, however, were extinguished, the damage by fire and water being estimated at \$10,000, fully insured.

The Steadman Lumber Co., of Columbia, S. C., was chartered last week, with a capital stock of \$5000, divided into fifty shares of \$100 each. The incorporators are G. E. Steadman, G. H. Steadman and J. P. Macken, all of Columbia.

The hardwood men of Chattanooga report business as very good at the moment. Messrs. Harter & Welch have lately received an order from Germany for oak, and have recently filled an order from the East for 5000 walnut gun stocks.

The receipts of lumber at New Orleans for the week ending July 30 amounted to

1,432,500 feet, and for the season 87,961,628 feet, against 75,598,250 feet. Receipts of laths for week 150,000, oak staves 188,800 and cypress staves 55,000.

The McMillan Cypress Lumber Co., of Mobile, will, it is stated, build a logging road through its timber land in the near future. A pull boat is also contemplated by this company, to be operated in its cypress swamps in Baldwin county, Alabama.

The Wilson Cypress Co., of Palatka, Fla., will shut down its plant about the 15th inst. in order to make extensive improvements. From the present indications this company will have a very heavy run of business during the fall and winter months.

Messrs. S. A. Davis & Bros. have about completed their saw mill at Crandall, Fla., and will begin sawing at once. The mill at Orange Bluff which they have lately operated will be turned over to Messrs. Brown & Davis, who will give it a general overhauling and operate the plant.

The regular monthly meeting of the Louisiana Cypress Lumber and Shingle Manufacturers' Association was held in New Orleans on 23d ult. The attendance was good, but little else than routine business was transacted. The shingle came up, but it was decided to postpone any discussion until another meeting.

The band saw mill of T. J. Asher & Sons, of Walsota, Bell county, Kentucky, made a heavy sawing record last month. The mill was in operation twenty-six days, ten hours each day, and the total amount sawed was 3449 logs, making 1,311,677 feet. The smallest amount sawed in any one day was 42,337 feet, and the largest amount 70,128 feet.

It is stated that the total stock of shingles now in sight west of the Mississippi is less than 200,000,000, while the requirements for the remainder of the present year will call for at least 500,000,000. Fully 75 per cent. of the shingle manufacturers in Arkansas, Texas and Louisiana will be out of timber about the first of the current month.

It is stated that the saw mills of Lake Charles, La., are now engaged sawing lumber for shipment to South Africa. Four or five million feet will be shipped during the months of September and October via Sabine Pass as an experiment, and if, after expenses are met, there is sufficient profit to warrant it, large shipments will follow.

The regular semi-annual meeting of the Southern Lumber Manufacturers' Association will take place in Memphis on Wednesday, the 12th inst. The meeting will be one of considerable importance, and various questions relating to the lumber industry will be carefully discussed. The question of a horizontal curtailment of output will be presented.

The Washington Venetian Blind Co., of Alexandria, Va., was chartered last week to manufacture venetian blinds and do all kinds of mill work. The capital stock is \$5000, divided into shares of \$100 each. The principal office of the company will be in Alexandria, with G. Hatley Norton as agent and Joseph Sprecht, of Gunston, Fairfax county, president.

The volume of business in lumber shipments at Sabine Pass, Texas, showed considerable expansion during the month of July. It is stated that there are now about eight vessels under charter with Beaumont lumber companies, in addition to those heretofore mentioned as having been chartered by the Reliance. The schooner Asa T. Stowell, loaded by the Consolidated Export Lumber Co., cleared last week for Tampico, Mexico, with 470,000 feet of lumber, and the Alice Archer

with a full cargo of lumber for Jamaica. The big steamer Darlington carried out 2,000,000 feet for London, loaded by the Consolidated Company. Shipments during the past month amount to about 6,000,000 feet. The following vessels will load for the Consolidated Company: The Swedish bark Severre for Bahia, the bark Celer for Montevideo, the bark Premiere for the Continent and the Iolanthe and the Stowell for Mexico.

The total value of Southern exports of lumber and timber for the month of June, 1896, were as follows: Baltimore \$128,393, Beaufort \$6248, Biloxi \$29,048, Brunswick \$79,482, Corpus Christi \$17,867, El Paso \$39,731, Mobile \$110,520, New Orleans \$230,384, Pascagoula \$140,590, Pensacola \$269,358, Sabine Pass \$16,754 and Wilmington, N. C., \$12,485, making a grand total of \$1,080,860.

A meeting of the Southern Cypress Shingle Association was held at Monroe, La., on the 23d ult. Owing to the improved condition of trade, it was decided to advance prices twenty cents a thousand on all grades. The following list, based on Texas, Oklahoma and Indian Territory common points, was adopted: Five and six inch best, \$2.75; four-inch best, \$2.55; five and six inch primes, \$2.35; four-inch primes, \$2.15; extra star A star, \$2; star A star, \$1.50, and clip-pers, \$1.15.

The timber market at Mobile has ruled steady, with a fair demand from European markets. Lumber prices are firm at list figures. The shipments of lumber during the past week were 1,397,017 superficial feet, mostly to South and Central American ports. The total shipments of lumber since September 1, 1895, amount to 57,650,151 feet, against 55,850,642 feet last year. In hewn timber 74,779 cubic feet were exported last week, and of sawn timber 170,458 cubic feet, all to Newcastle and Greenock.

Iron Markets.

Cincinnati, Ohio, August 1.

The business of the week under review has been fairly satisfactory, considering all the adverse conditions. The republican form of government adopted by our forefathers, vouchsafing to every citizen the free exercise of his franchise, never contemplated the tremendous acquisition of the heterogeneous elements making up the voting population of our country today. The diversity of views regarding the paramount question of national finances and currency naturally awakens concern on the part of the conservative and prudent manufacturers and investors. The belief is gradually and probably securely obtaining that the policies of the fanciful financiers of the white-metal persuasion are not to govern the policy of the present or coming administration, but the present uncertainty creates distrust, and renders the outlook correspondingly obscure.

The evils of free and unlimited coinage of silver have been largely discounted, and whether the decision of the people will demand the maintenance of the existing gold standard or inaugurate the policy of depreciated money, higher prices must inevitably result. From the standpoint we occupy there can be no doubt that purchases of pig iron at prices obtainable today will be advantageous. There are but fifteen coke furnaces in blast in all Alabama, the principal and controlling centre of Southern products.

There are but eight furnaces in blast in the Mahoning and Shenango valleys.

Pennsylvania has reduced its output largely, approximating 50 per cent. of furnace capacity.

From this data it is reasonable to suppose that current production is less than consumption, and prices must come into

harmony with conditions prevailing. The total production of pig iron for the first half of 1896 in the United States was 4,976,236 tons. The stocks at the furnaces July 1 were large in proportion, but the curtailment of output through the past month has seemed to reduce the accumulation, and an ordinary consumption will quickly absorb the surplus.

We quote for cash f. o. b. Cincinnati:

Southern coke No. 1 foundry...	\$10 00	\$10 25
Southern coke No. 2 foundry...	9 50	9 75
No. 1 soft...	9 50	10 00
Lake Superior coke No. 1...	12 00	12 50
Lake Superior coke No. 2...	11 50	12 00
Hanging Rock charcoal No. 1...	15 00	16 50
Tennessee charcoal No. 1...	13 00	14 00
Jackson Co. silvery No. 1...	13 50	14 00
Southern coke, gray forge...	8 75	9 00
Southern coke, mottled...	8 75	9 00
Standard Alabama car-wheel...	14 75	15 50
Tennessee car-wheel...	13 50	14 50
Lake Sup. car-wheel & mill's...	14 75	15 25

Chicago, Ill., August 1.

Another quiet week in the pig-iron market. That is about the whole story. A few large buyers have been making inquiry as to present prices, and are considering the advisability of placing orders now.

There are evidences of strong faith in the favorable outcome of our business and political problems, and a buying movement of no mean proportions may soon begin.

With iron selling below actual cost, with a large percentage of furnaces out and going out of blast, and with consumption maintaining a fair average, it is difficult to see how prices can go lower.

We quote as follows:

Lake Superior coke No. 1 fdy...	\$11 50
Lake Superior coke No. 2 fdy...	11 00
Lake Sup. charcoal, Nos. 1 to 6...	13 50
Ohio Scotch No. 1...	14 00
Jackson Co., O., silvery No. 1...	14 50
Alabama silvery No. 1...	11 85
Southern coke No. 1 foundry...	11 35
Southern coke No. 2...	10 85
Southern coke No. 3...	10 35
Southern coke No. 1 S...	10 85
Southern coke No. 2 S...	10 60
Mannie...	11 75

St. Louis, Mo., August 1.

The month of July closes as it came in, on a quiet iron market. The lowest prices of the year have been reached this month.

The Western grain crops are promising, and although the general impression is that trade will be dull during the next month, the present indications are that the fall trade will show a considerable improvement.

The consumption of iron is fairly good.

We quote for cash f. o. b. St. Louis:

Southern coke No. 1...	\$10 75
Southern coke No. 2...	10 25
Southern coke No. 3...	10 00
Southern gray forge...	9 75
Southern charcoal No. 1...	15 00
Ohio softeners...	16 00
Lake Superior car-wheel...	15 25
Southern car-wheel...	15 75
Genuine Connellsville coke...	5 00
West Virginia coke...	4 50

New York, N. Y., August 1.

While there has not been a large amount of orders placed during the past week, the aggregate has been fairly satisfactory, considering the timidity in financial circles.

We are persuaded that the Eastern business is much larger than in the West. However, this is accounted for by the extraordinary heavy sales made in the West during the month of March, on which the iron is now going forward.

While we do not look for a boom in prices, we do think that, on present basis, it is a good time for buyers to cover for at least a half of their requirements during the latter half of the year.

We quote for cash f. o. b. docks or cars, New York:

No. 1 X standard Southern...	\$11 25
No. 1 X choice Virginia, such as Shenandoah...	12 00
No. 2 X Alabama or Virginia...	10 75
No. 1 soft Ala. or coke iron...	10 75
No. 1 X lake ore coke iron...	14 00
No. 2 X lake ore coke iron...	15 50
Lake Superior charcoal...	15 85

We quote for cash f. o. b. Philadelphia docks:

No. 1 X standard Alabama...	\$11 25
No. 2 X standard Alabama...	10 75
No. 1 X standard Virginia...	11 75
No. 2 X standard Virginia...	11 25
No. 1 X lake ore iron...	14 00
No. 2 X lake ore iron...	15 50
Lake Superior charcoal...	15 85
Standard Georgia charcoal...	16 25

ROGERS, BROWN & CO.

MECHANICAL.

Variable Pressure Alarm Valve.

The importance and value of the automatic sprinkler system as a means of extinguishing fire has naturally absorbed the attention of all persons interested in the subject of fire-extinguishing and fire-alarms, but the fact that the automatic sprinkler system itself may readily be arranged to constitute a fire-alarm as perfect as any known apparatus has been largely lost sight of. For sounding an alarm on the premises where the sprink-

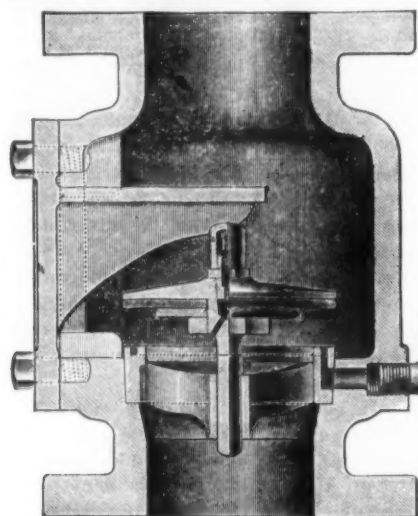


FIG. A.

lers are installed, this method serves the purpose as effectually as the so-called thermostat system.

It is the flow of the water itself which is utilized to operate the alarm.

But however simple and sure this method of sounding an alarm would seem to be, it has been found difficult to put in practice, and it has generally been abandoned, because false alarms were liable

on a bronze ring. This seat has a circular groove, having an outlet connecting with a one-half-inch pipe.

When a sprinkler opens, the water flowing into the system lifts the check valve and uncovers the circular groove, through which the water passes into the one-half-inch pipe and is made to sound a continuous electrical alarm (Fig. B), or a me-

This English alarm valve, with water-motor attachment and its great iron gong (Fig. C), has a splendid record. It has been in use for several years in hundreds of Grinnell equipments installed by Dowson, Taylor & Co., Limited, in Great Britain, Europe and the colonies. No Grinnell installation is there considered complete without it.

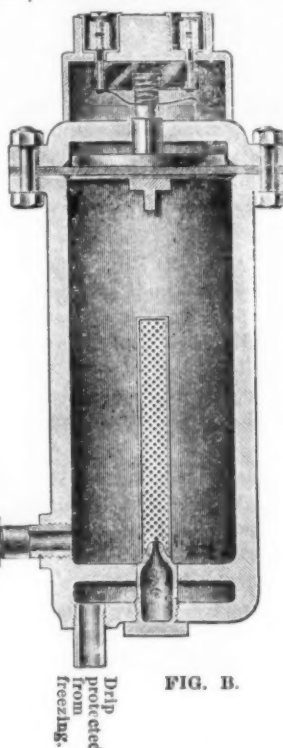


FIG. B.

A Useful Cotton-Mill Tool.

The labor in a cotton mill is largely employed in repairing faults made in the yarn by the different piecings. Starting with the drawing-frame, the sliver is weakened every time a can empties, when a piecing is necessary. Following on through the roving-frames and spinning-frames, where the supply is con-

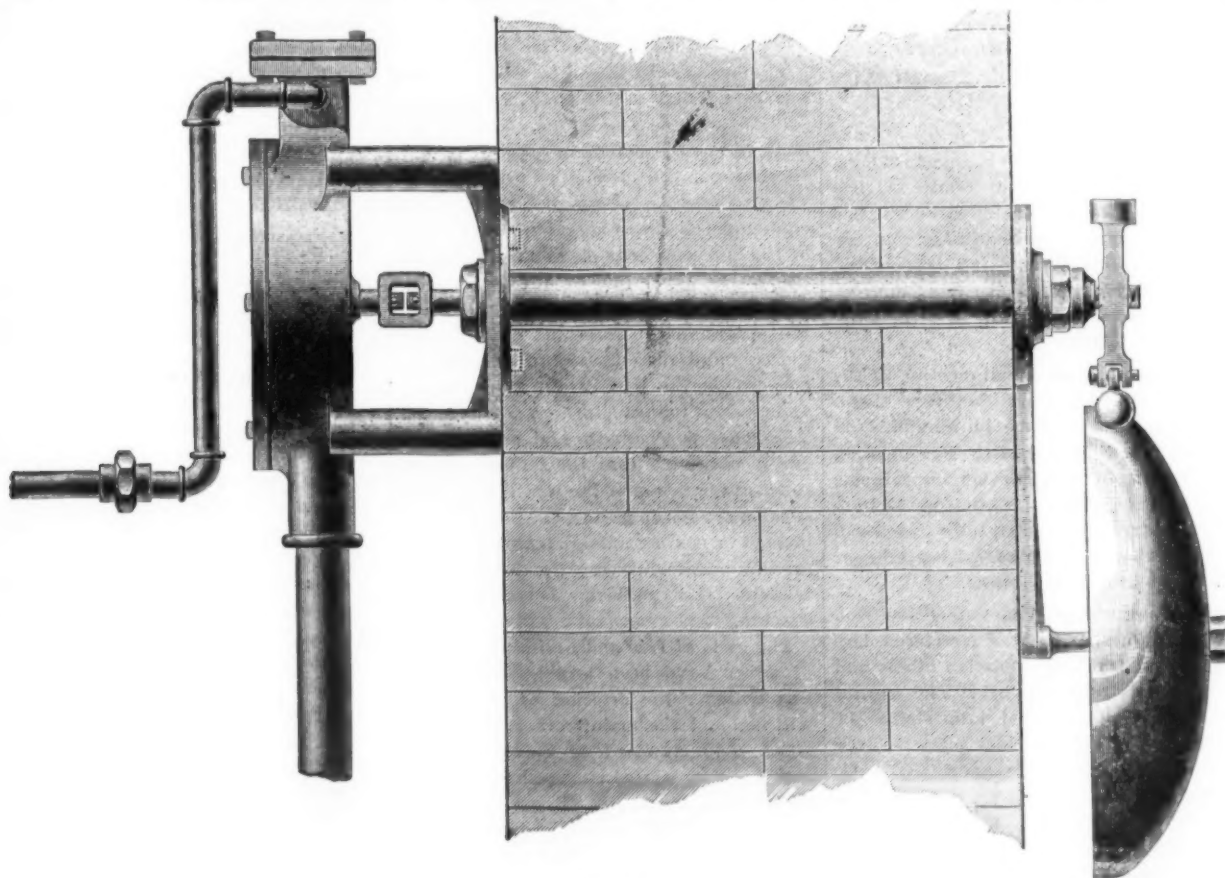


FIG. C.

to be given by reason of variable pressure in the supply.

This serious fault has been entirely removed by the Grinnell "English pattern" alarm valve (Fig. A).

This alarm valve (located in the main riser of the sprinkler system) consists of an iron shell, containing a bronze check valve, having a rubber face and seating

alarm (Fig. C), an intercepting drip prevents the accumulation of sufficient pressure to actuate the water motor, and no alarm is given.

For the drip-pipe system, the Grinnell air valve is also so arranged as to operate either a mechanical alarm or an electrical alarm, and the circuit-closer is made on the valve.

the fibre being by this time so much twisted that the former lapping-on process will not suffice. Knots being absolutely necessary, can only be diminished by making the yarn strong enough so that it will not break at its weakest places, or by using bobbins holding a larger supply, so that a spool can be filled from a less number, requiring fewer knots in proportion. Knots properly tied firmly unite the ends of broken yarn, but further damage is not ensured against on this account.

In weaving at the loom, the warp threads are subject to so much friction that the presence of these knots, with their long ends, greatly aggravates the harsh treatment to which the yarn is necessarily subject, and tests show that more than three-fourths of the warp breaks at the loom are caused by the presence of these knots. As the operation of weaving requires labor that is largely occupied in repairing warp breaks, it is evident that an improvement in this direction may be so used as to materially reduce the cost of manufacture and improve the quality of the cloth, as each broken warp thread causes more or less of a blemish. As has been said before, many mills change over their spinning-frames to use a larger bobbin, thereby diminishing the number of knots necessary.

An authority on the subject says:

"A diminished evil, however, is still worthy of a cure, and if cure is possible, no manufacturer can afford to neglect investigation. After careful study of the problem, a conclusion is reached that there are two practical ways in which to conquer the difficulty. The knot, being necessary, must be made unobjectionable so far as possible. Experience shows that



SPOOL TENDER'S KNOT TRIMMER.

knots are troublesome mainly for their long ends, though also on account of the bunch necessarily made. Some mills have met the problem by forcing their spooler-tenders to tie weavers' knots instead of the usual spoolers' knots. Weavers' knots have short ends and are small in diameter. In England and other foreign countries this is common practice, and the only reason our millmen have not followed is probably because labor, being more expensive in this country, must be favored to some extent. It is probably hard to convince the average spooler-tender at the start that they could do as much work tying weavers' knots as tying the usual kind. We know of mills, however, where the results show that the help can learn to become equally efficient either way."

For such mills as might have difficulty with such a change, another way of helping out the difficulty is presented. We refer to the spooler-tenders' knot-trimmer, already familiar to many, which is a simple knife made with a ring to fit the operative's finger in such manner that the ends of the knots may be easily cut while the hands are in the usual operating position. It is known as the Bourne & Johnson spool-tender's knot-trimmer, and is made by George Draper & Sons, Hopedale, Mass.

These knot-trimmers are used in many mills where a good thing is appreciated, but in several instances there has been objection made on account of the price asked. In this connection the manufacturers say: "Certain economies are made very expensive to those practicing them. If we had made an elaborate machine, evidently costing hundreds of dollars for the mechanism, we could undoubtedly

have sold the same to mills should we be able to guarantee that it would cure the trouble caused by long-ended knots. The usual mill would be glad to pay as high as \$1000 to be guaranteed against this evil. We are selling a device whose use will largely accomplish this benefit, and the total expense to the mill is but a few dollars at the most. In the face of this fact its sale meets opposition simply because it appears to be sold at a profit. We cannot understand the type of human nature that is not willing to pay a dollar for an article apparently costing twenty-five cents when the benefit gained to the mill may be worth hundreds of dollars.

"Explaining this special case, we will say that this knot-cutter was developed after patient trial and considerable expense by a prominent millman who has done much in other lines to improve mill machinery. We have taken this device and had it patented under an arrangement by which the inventor gets a share of the profits. We charge \$1 each, and are perfectly free to say that they do not cost us over twenty-five cents to manufacture. Should we sell them to every mill in the country at the price asked, the inventor will still be very poorly rewarded for his contribution to the cotton-manufacturing art, and we ourselves shall have been scantily remunerated for the expense of patenting, selling and general expense involved.

"We have enlarged upon this matter at some length, not for the mere sake of introducing this little device, but for the reason that it furnishes an excellent opportunity to point a moral which may

ferry slips, freight, etc. It is intended to move up and down to meet the varying requirements of tides and light or loaded vessels.

The bridge is operated through worm gearing and stands locked where left. The arrangement is in itself made a per-

fect balance, and is therefore capable of being moved with the least possible amount of friction. From the nature of the mechanism it is said to be at once powerful, simple and free from danger of derangement.

The company is now completing six of

many companies as the best type of wharf drop machinery.

"DeLoach" Variable Friction-Feed Planer.

A variable feed for a planer is considered just as desirable as for a saw mill.

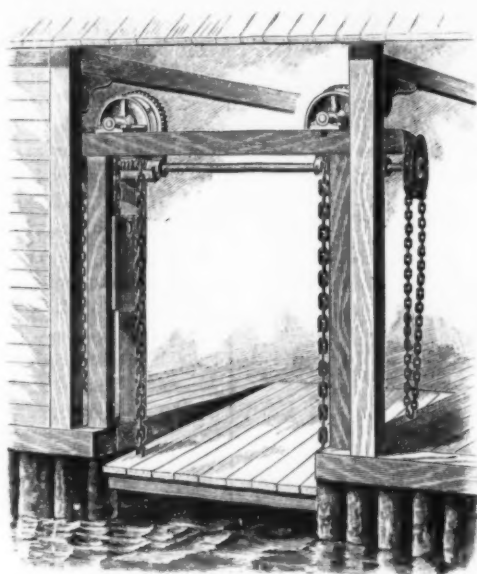
advantage of the variable feed, which provides for a very slow speed on heavy cuts, knots, etc., while they have an equal advantage in running fast on light cuts. It also avoids the necessity of ever stopping the feed for the machine to regain its speed. The manufacturers say:

"We feel perfectly safe in making a guarantee that it will actually do 20 per cent. more work than the ordinary machine of the same size. This, considered with the additional advantage of having it done accurately and smooth, makes it the leader in machines of this class."

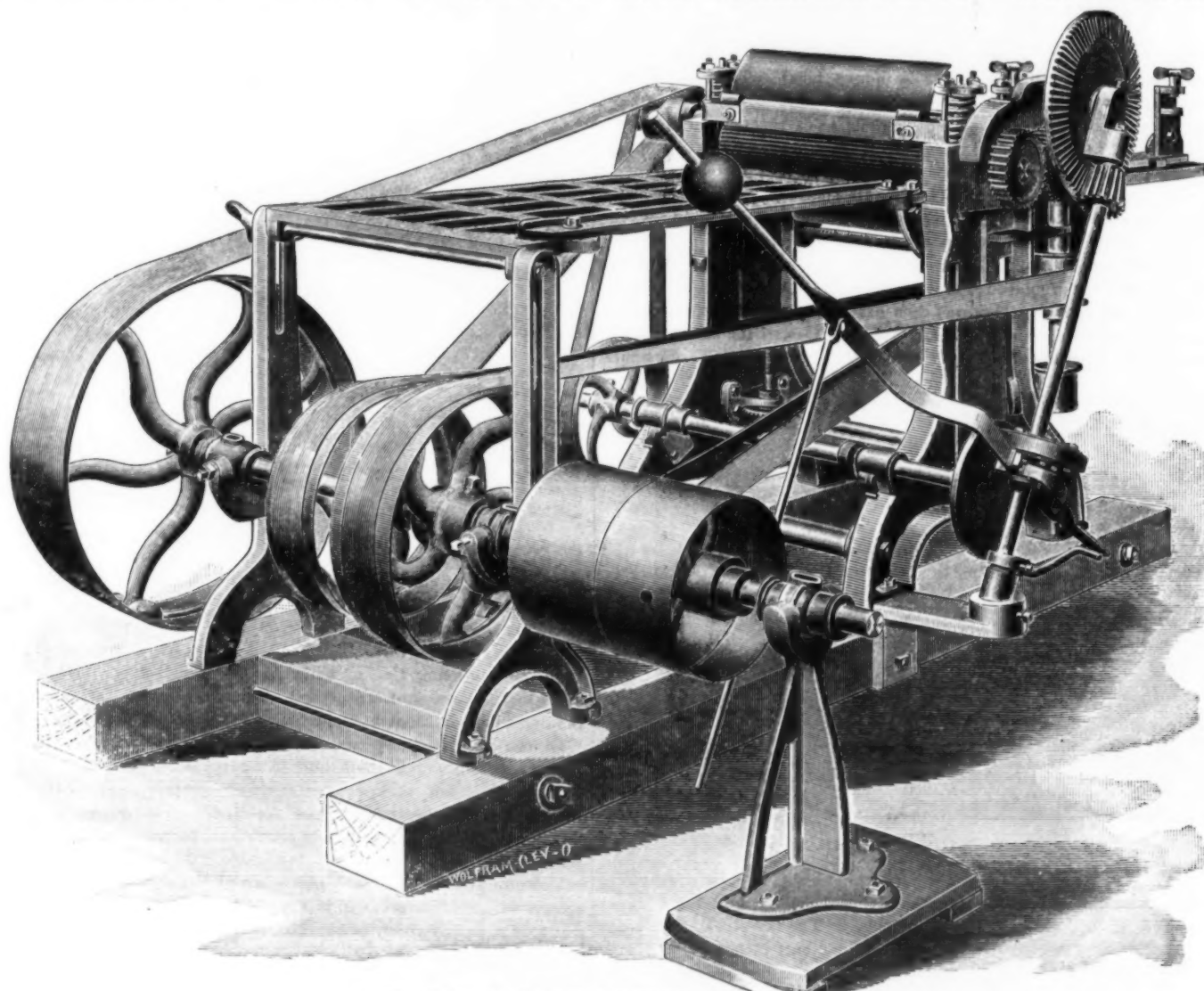
The feed is also automatic in that it is operated from the cylinder shaft, and in case of accident the feed will stop with the cylinder, and can be stopped or started while the machine is in operation by simply touching the friction lever. Only one lever, as shown in cut, is required to control every movement of the variable feed; that is, to stop, start or vary it. It is described as absolute perfection in its operation.

This machine will dress twenty inches wide, six inches thick, match twelve inches wide and from one-half to two inches thick; will surface 10,000 feet in ten hours with ease, and dress and match about one-half this amount. The countershaft should run a speed of 900. The receiving pulleys are ten inches diameter, six-inch face, one tight and the other loose. It has four feed rollers, the two top ones driven and the two bottom ones idlers.

With this machine are furnished one set



IMPROVED WHARF DROP.



"DeLOACH" VARIABLE FRICTION FEED PLANER.

have weight in the future in dealing with more important cases."

Improved Wharf Drop.

We illustrate herewith the patent wharf drop manufactured by the American Ship Windlass Co., Providence, R. I. It is designed for passenger foot bridges,

this pattern for the wharf that is to be occupied by the Philadelphia & Baltimore Steamboat Co., Philadelphia, Pa. It has also just shipped four drops for the Girard pier, which is to be used by the Clyde Steamship Co. Twelve of these wharf drops are also in use by the Boston & Philadelphia Steamboat Co. and by the Wilmington Steamboat Co., the

Believing that such an improvement would be appreciated, the machine herewith illustrated was recently perfected by the DeLoach Mill Manufacturing Co., Atlanta, Ga.

It is said to be in every particular equal to the best machines made, with the additional advantage of a variable feed. Practical operators can appreciate the

of planer knives, one pair of matcher heads, with bits and suitable wrenches. When ordered with molding attachment, one pair of beading tools or novelty knives and one pair of three-inch molding knives are furnished; weight of machine on skids, 1600 pounds; amount of power to operate successfully, six horse-power.

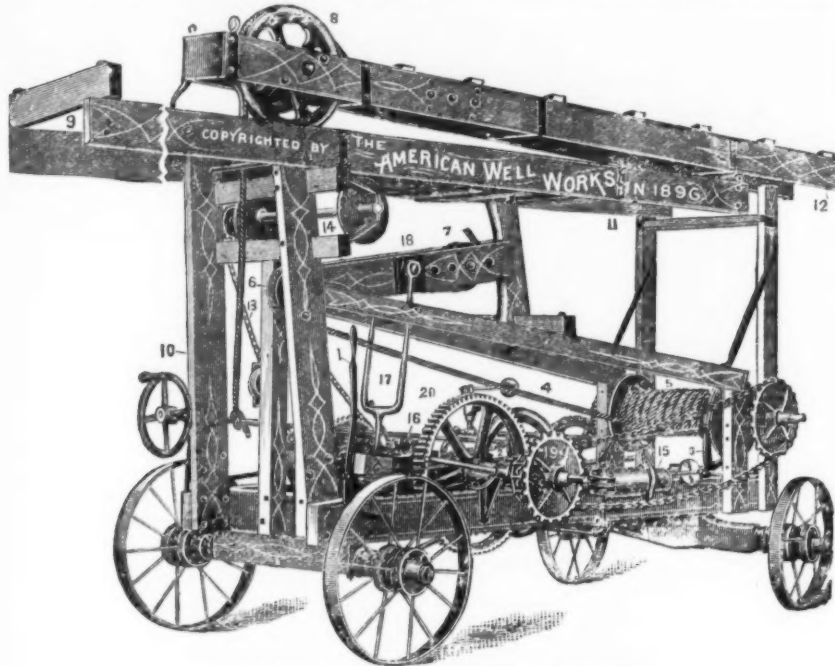
Improved Well-Drilling Machine.

One of the improved mounted elliptical well-drilling machines manufactured by the American Well Works, Aurora, Ill., (branch houses, Chicago, Ill., Dallas, Texas,) is shown herewith. As illustrated, the machine can be driven by any independent belt-power, and is also arranged to be operated by horse-power, gasoline-power or any convenient belt-power that the purchaser may have. It will handle with equal rapidity hollow-rod tools, rope or wire-cable tools, pole

and seven-eighths inches over plain rest. A four-and-one-half-foot lathe will take twenty-four inches between centres, and will cut threads two to forty per inch, and also pipe threads.

This lathe is built with either three or four speed cones, being respectively six and one-half, four and three-quarters and three inches diameter and six and three-quarters, five and one-half, four and one-half and three inches diameter, and for two-inch belt.

The spindle is one and eleven-sixteenths inches diameter, with eleven-sixteenths-



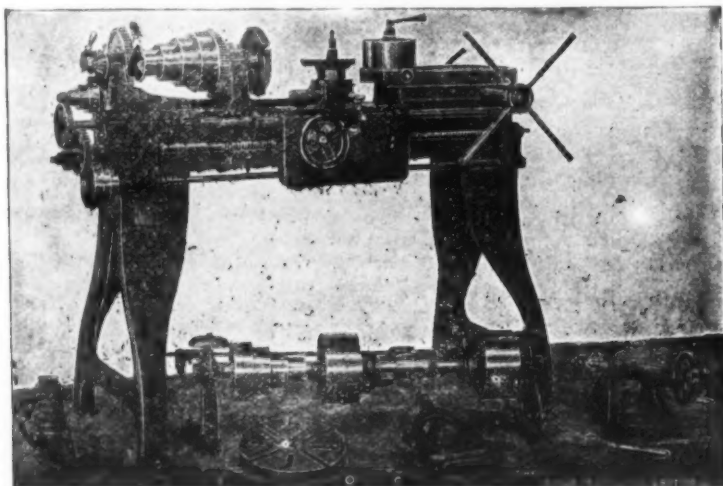
IMPROVED WELL-DRILLING MACHINE.

tools or rotary tools. The stroke is made by an elliptical drilling movement operating a walking beam, which gives a slow and powerful lift, with a quick drop. The rope drum is situated at the rear end of the machine, from which the rope passes over a sheave at pivot of walking beam, thus enabling the rope to coil uniformly on the drum. This derrick is readily folded when moving from place to place, and can be quickly replaced ready for work, thus saving considerable time in setting up over the ordinary machine. By combining the double-acting

inch hole through entire length (this being their standard hole), which can be increased if so ordered.

The spindle is of the best grade hammered steel, and is accurately ground, and runs in bearings of phosphor-bronze.

The spindle bearings are, front one and eleven-sixteenths by three and seven-eighths inches, and back one and seven-sixteenths by two and one-half inches. The carriage is gibbed front and back, and has extra large bearings the entire length, and is arranged for side facing. The tail-stock is one and seven-six-



NEW 12-INCH ENGINE LATHE.

gasoline engine and this machine, unusual advantages are secured.

New 12-Inch Engine Lathe.

The illustration herewith shows the new 12-inch engine lathe as built by the A. P. Wagner Tool Works, of Sidney, Ohio.

The cut shows its 12-inch by four-and-one-half-foot bed screw and rod feed engine lathe, with four-speed cone, plain rest, turret attachment and friction countershaft.

This tool swings twelve inches over the bed, eight and five-eighths inches over the carriage and seven

teenths inches diameter, and has a travel of four inches. The tail-stock has a bearing nine and one-half inches.

This lathe is furnished complete, with steady rest, large and small face plates, finished drop-forged wrenches, full set of standard change gear, and with either plain or automatic turret attachment, compound rest, raise and fall rest or taper attachment, as desired. It is also furnished with plain or friction countershaft, or with plain or bicycle foot motion.

This company has a thoroughly-equipped plant particularly adapted for the manufacture of lathes, and the entire

equipment is the most modern machinery. It has spared neither time or expense in bringing out its line of tools, and is building a line of lathes (eight to eighteen inches) comparing favorably with any other in the market.

A rigid system of inspection is pursued with parts, as well as the whole machine, and each and every lathe is subjected to actual operation before leaving the works.

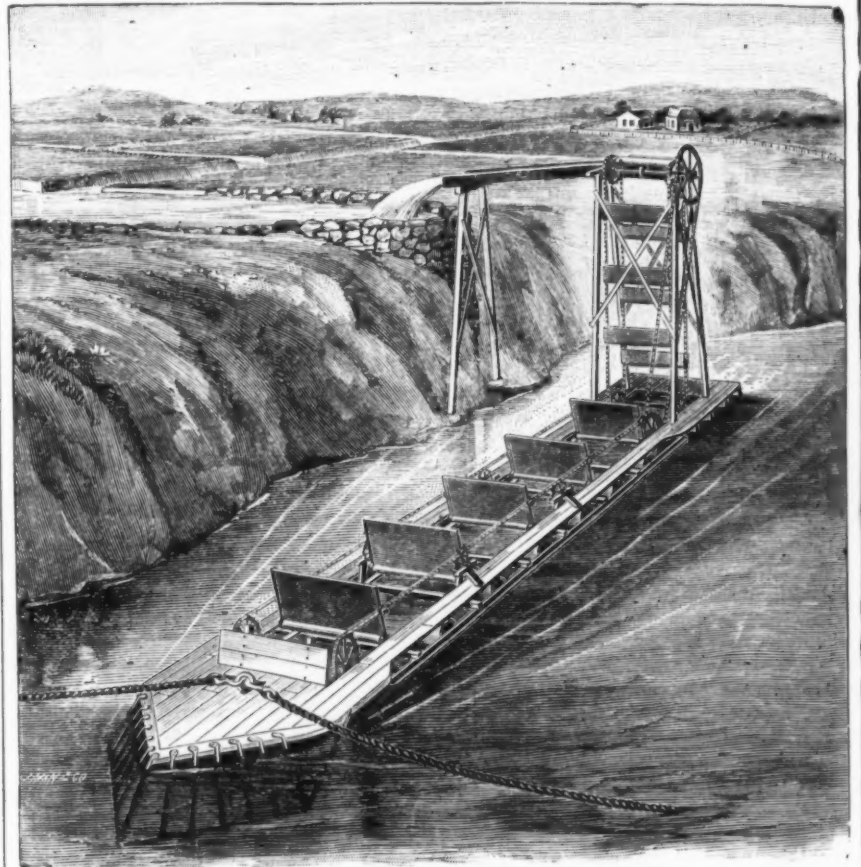
This company builds a line of lathes eight, ten, twelve, fourteen and eighteen inches in all the various forms—engine, plain foot motion and bicycle foot motion. Its entire line is illustrated in five catalogues, one book for each size. These catalogues are very complete, showing the tools in the various forms, with all tools, attachments, chucks, etc., adapted to each size tool, as also various views of their works. They are also published in four languages, English, German, Spanish and French, and each book contains a telegraph code.

The Austin Current Motor.

The name "current motor" is applied to a mechanism that utilizes the power

being conveyed to it through ditches by means of gravity. Under such conditions the land is now generally not irrigated, particularly in the arid regions, except to a limited extent in those localities where vegetables and fruit are raised, where the value of the crop compensates in a measure for the expense of pumping water by steam or gasoline engine, both of which require fuel and an engineer. The capacity of the wind mill is too limited to admit of its general use for irrigation on a large scale. To such localities the Austin current motor is considered a boon. This motor has been experimented with and tested thoroughly to practically demonstrate its usefulness. The only limits, it is stated, to the power, and consequently to the amount of water that can be pumped by the Austin current motor, are the dimensions of the paddles, the number of them and the force of the current.

The machine, which is anchored in the river, consists of a pontoon carrying two endless chains, to which are pivotally attached at suitable distances reversible paddles having floats at the upper ends



THE AUSTIN CURRENT MOTOR.

of the stream or current of a river in such a way that it can be applied to operate machinery. Crude attempts have been made to accomplish this. The F. C. Austin Manufacturing Co., of Chicago, Ill., seem to be pioneers of a practical current motor, which is illustrated herewith.

Rivers have been utilized to run machinery by damming them and using a water-wheel, but this necessitated the expense of the construction and maintenance of the dam, and was only available where the conditions were favorable, which limited their use. The current motor, we are informed, can be used without a dam, in any river, in any location in the river where the water is deep enough to admit it. There is, it is said, almost no limit to the use to which the power generated by a current motor can be applied. For example, it may be used for generating electricity for electric-lighting purposes, and for various machines used on a farm now run by steam, but its chief use will be in connection with irrigation and mining.

There are many localities all over the country where the land adjacent to the river is too high to admit of the water

that buoy them up in their course through the water. By an ingenious device these paddles enter and leave the water in such a way that they do not detract from the efficiency of the machinery, but, on the contrary, rather add to it. To the wheels put in motion by these cables is attached an elevator carrying large buckets, which, when entering the water to fill themselves, add to the generation of power, and are so arranged that when they reach the top of the elevator they discharge their contents to the shore, where a reservoir has been constructed to collect the water and distribute it through canals and lateral ditches over the land.

The first outlay for a current motor of this description is, comparatively speaking, not large, particularly when the enhancement of the value of the land is considered, and the cost of running it is nominal. It works, we learn, incessantly day and night without an attendant, and if the capacity of the reservoir is sufficient a large volume of water is accumulated to be used at the proper season.

F. C. Austin Manufacturing Co., Chicago, Ill., will furnish full details on application.

CONSTRUCTION DEPARTMENT.

THE MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in any town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and even then they must expect the return of some letters, because of the lack of knowledge on the part of postmasters of all new companies. Criticisms and complaints are invited, as they will the better enable us to guard against errors.

ALABAMA.

Anniston—Rolling Mill.—The United States Car Co. will put all departments of its rolling mill into operation; George Lowe, superintendent.

Birmingham—Snuff Factory.—The McNamara-Laird Co. has been incorporated, with capital stock of \$50,000, to operate the snuff factory recently reported as to be established; building has been secured and the machinery is now being installed; D. J. McNamara, president, and S. E. Laird, secretary-treasurer.

Florence—Bridge.—It is stated that the Belt Line Railroad (A. E. Walker, of Florence, representing J. F. Montgomery, of Taunton, Mass., owner,) will construct a new bridge across Sweetwater creek.

Gadsden—Manufactory.—It is reported that a big factory will be erected near Gadsden.

Geneva—Water Works.—The construction of water works is talked of. Address the mayor.

ARKANSAS.

Little Rock—Cold-storage Plant.—The Little Rock Cold Storage Co. has been organized, with Will O. Davis, secretary-treasurer, and capital stock of \$10,000; company has purchased an established plant and will double capacity of same.

FLORIDA.

Cedar Keys—Saw Mills.—H. M. Campbell is erecting a large cypress mill.

Cocoanut Grove—Cigar Factory.—M. Encimoral & Co. will establish a cigar factory.*

Green Cove Springs—Canning Plant.—The Green Cove Springs Canning Co. is the name of the company establishing the plant already reported; will have a daily capacity of 10,000 cans, but all of the machinery has not yet been purchased; F. H. Hafer, manager.*

Inverness—Canning Plant.—J. B. Young & Co. have established a canning plant of 750 cans daily capacity.

Miami—Water Works.—The construction

of water works, as recently referred to, is assured; all of the machinery is about contracted for; A. L. Knowlton, engineer.

Tarpon Springs—Telephone Lines.—H. B. Webster and L. T. Safford, of Tarpon Springs, and Allister McLeod, of St. Petersburg, have organized a company to construct a telephone system, etc., to be known as the Tampa & West Coast Telephone & Telegraph Co.

GEORGIA.

Atlanta—Amusement Company.—The Atlanta Exposition Park Co. has applied for charter, with capital \$20,000; Jas. R. Wyllie and others interested.

Barnesville—Knitting Mill.—For information concerning the knitting mill reported last week, address J. W. Hanson.

Dahlonega—Gold Mines.—E. E. Crisson has leased a part of the Lockhart gold mine and will develop same.

Macon—Water Works.—The Macon Gas, Light & Water Co. (T. D. Tinsley, receiver,) has applied to the court for permission to issue certificates for \$125,000 for extensive improvements which are to be made to the plant. The improvements proposed include erecting a new pumping station, 5,000,000-gallon pump, and boilers, filter plant, 20-inch mains, 4000 feet of 12-inch pipe, 4000 feet of 10 or 12-inch pipe, etc.

Thomasville—Telephone System.—J. W. Spain has obtained franchise for telephone system and will organize company to establish same.

Thomasville—Cotton-gin Works.—O. F. Goodwin has established works for making Sea Island cotton gins.

West Point—Electric-light Plant.—The West Point Manufacturing Co. will put in a new dynamo and 600 incandescent lamps.*

KENTUCKY.

Kentucky—Land Improvements.—J. E. McDonald, of East Liverpool, Ohio, and associates have formed a company to develop a town opposite to East Liverpool, in Kentucky, and will locate factories, etc.

Louisville—Warehouse Company.—Tobacco warehousemen of the city have consolidated and applied for incorporation as the Louisville Tobacco Warehouse Co. The capital stock is \$1,600,000, and Henry Glover will be president.

Springfield—Water Works and Electric-light Plant.—The city is considering the establishment of electric-lighting and water-supply systems, as recently reported; A. R. Shultz, mayor.

LOUISIANA.

Lafayette—Oil Mills.—The Lafayette Cotton Oil Co. has let contract for the erection of its mill building to C. D. Stewart, of Opelousas, La., at \$5988.

Natchitoches—Electric-light Plant and Water Works.—J. A. Ducourneau, Jr., and J. C. Trichel, Jr., contemplate the establishment of electric-lighting and water-supply plants.

New Orleans—Electric-light Plant.—The New Orleans & Western Railroad will extend its electric plant about one-third of present capacity to accommodate the additional wharfage at Port Chalmette; J. M. Turner, general manager.

Welch—Rice Mill.—W. C. Haughterling and E. C. Walker, of Welch, and Stewart Thomson, of Lake Charles, have incorporated a company and let contract for the erection of a \$10,000 rice mill.

MARYLAND.

Baltimore—Oil Company.—T. W. Bamberg, R. R. Graf, T. Rothchild, T. G. Rend and W. H. Jackson have incorporated the National Oil Co., with a capital stock of \$2000, to manufacture lubricating oils, etc.

Cumberland—Electric-light Plant.—An ordinance has been introduced in the city council calling for an election on issuing \$20,000 in bonds for the construction of water works. Address the mayor.

Easton—Telephone System.—The Union Telephone Co., M. M. Higgins, manager, will construct telephone system and establish exchange.

Hood's Mills—Flour Mill and Grain Elevator.—The new Hood's Mills Milling Co., noted last week, will operate a 50 to 60-barrel flour mill and grain elevator; also corn-meal and chopping mill; buildings will be 28x55 feet and 45x28 feet; power furnished

by water; all machinery has been bought; Wm. H. Stinson, president; Wm. L. Hammond, treasurer, and Walter Dorsey, of Gary, Md., secretary.

Ocean City—Water Works.—There is some talk of expending \$15,000 to establish a system of water supply. Artesian wells would be used. Address Geo. M. Upshur, mayor.

Pocomoke City—Flour Mill.—C. H. Long will put in a 25-barrel flour mill (three stands); contract is about to be awarded.*

Principio Furnace—Iron Furnace.—The Principio Forge Co. (the Whitaker Iron Co., of Wheeling, W. Va., owner,) will put in more forge fires and a 5000-pound steam hammer and double its capacity of charcoal-iron blooms.

Washington, D. C.—The Halpine Torpedo Co. will hold a meeting, August 20, to increase capital stock from \$100,000 to \$1,000,000; Nicholas J. Halpine, president.

Washington, D. C.—Woodworking Mill.—The Washington Venetian Blind Co. has been incorporated, with capital stock of \$5000, to operate mills; Joseph Specht, Gunston, Va., president.

MISSISSIPPI.

Aberdeen—Water Works.—The city contemplates the construction of a water system, as reported; plant will probably be constructed at an early date; J. M. Aiken, mayor.

Greenville—Hardware Company.—Jas. S. Walker and Samuel R. Geise have incorporated the Mississippi Hardware Co., with capital stock of \$25,000, for dealing, etc.

Magnolia—Electric-light Plant, Ice Plant, etc.—The Magnolia Gin & Light Co. has been organized to erect a cotton ginner, electric-light plant, ice plant, etc. Arrangements for erecting the several enterprises will be completed at once; J. E. Wolfe, president; John Hough, vice-president, and W. K. Nettles, secretary-treasurer-manager.*

McComb—Canning Plant.—A. J. Hackett is now closing arrangements for the location of a large canning and pickling plant with Chicago, New York and Montreal capitalists. It is stated that \$500,000 will be invested in the plant.

McComb—Cotton Ginnery.—N. P. Johnson will rebuild his burned cotton gin.

McComb—Ginnery and Grist Mill.—A stock company is being organized to erect a cotton ginnery and grist mill.

McComb—Machine Shop, Planing Mills, etc.—A company with capital stock of \$25,000 has been organized to erect and operate sash, door and blind factory and machine shop. Employment will be afforded about 100 hands.

Natchez—Gas Plant.—The Natchez Gas Light Co. is now engaged in making extensive repairs to its plant, previously reported. New retorts, purifiers, etc., are being added.

Scooba—Woodworking Plant.—R. D. Harper and others will establish a plant for woodworking.*

MISSOURI.

Chillicothe—Manufacturing, etc.—The Chillicothe Separator & Manufacturing Co. has been chartered, with capital stock of \$5000, by W. B. Leach and others.

Craig—Electric-light Plant.—The city has under consideration the issuance of bonds for the erection of an electric-light plant. Address the mayor.

Cumberland—Electric-light Plant.—The erection of an electric-light plant is talked of. Address the mayor.

Dexter—Water Works and Electric-light Plants.—The establishment of water and electric-lighting plants is talked of.

Dexter—Water Works.—The city will construct the water works, as reported last week. I. A. Smith, of Chester, Ill., has been engaged to prepare plans. Electric-light plant is also talked of. Address the mayor.

Independence—Lumber Mills.—John McCoy, Joseph McCoy and E. F. Jones have incorporated the Independence Lumber Co., with capital stock of \$10,000.

Poplar Bluff—Realty Company.—J. S. Mengal and others have incorporated the Ruth & Mengal Realty Co., with a capital stock of \$100,000.

Richmond—Water Works.—The proposed water works, already noted, will be constructed by the city, and an engineer has been engaged to prepare plans and supervise

the work; bonds for \$45,000 have been voted to pay for the plant; W. T. Shoop, mayor.*

St. Louis—Business College.—The Barnes Business College Co. has been incorporated, with capital stock of \$10,000, by Arthur J. Barnes and Louisa E. Barnes.

St. Louis—Slate Company.—W. P. Davis and others have incorporated the Missouri Slate Co., with a capital stock of \$8000.

St. Louis—Improvement Company.—F. M. Sterrett and others have incorporated the Forest Park Highland Improvement Co., with capital stock of \$4800.

NORTH CAROLINA.

Charlotte—Furniture Factory.—John Wilkes has purchased the Elliott Furniture Factory for \$7000.

Hillsboro—Shoe Factory.—The State Farmers' Alliance shoe factory has been equipped and will start operations, making 600 pairs of shoes daily. One hundred hides will be utilized daily.

Kinston—Electric-light Plant.—The city has voted an issuance of \$8000 in bonds for the erection of an electric-light plant; J. B. Temple, mayor.

Laurel Hill—Cotton Mill.—The Springfield Cotton Mills has just put in new cards.

Wilmington—Coal Chutes, Depot, etc.—Plans are now in hand for the depot, extensive coal chutes and other improvements to be made at Southport, near Wilmington, by the Carolina, Tennessee & Ohio Railroad. The work on same will soon be commenced and pushed to completion. J. E. Challenger, of Philadelphia, Pa., is president.

Winston—Lithographing Plant.—A company has been formed, as recently reported, to establish a lithographing plant. C. G. Lanier can be addressed for information.

SOUTH CAROLINA.

Beaufort—Water Works.—The Beaufort Water Works Co., recently incorporated, has capital of \$25,000, and G. Holmes is president; F. W. Scheper, treasurer, and W. P. Waterhouse, secretary.

Cheraw—Braising Plant.—The South Carolina Braiding Co. is adding more machinery to its plant.*

Columbia—Lumber Mills.—Chartered: The Steadman Lumber Co., capital stock \$5000, to operate saw mill and manufacture sash, doors and blinds; G. E. Steadman, G. H. Steadman and J. P. Macken, incorporators.

Greenville—Machine Shops.—Cely & Bro. have rebuilt their molding-room which was recently burned.

Marion—Electric-light Plant.—The Marion Oil Mill Co. will put in an electric-light plant.

McColl—Cotton Mill.—The McColl Manufacturing Co. has applied for increase of capital stock from \$50,000 to \$150,000, a new mill being contemplated.

Spartanburg—Fertilizer Factory.—J. R. Robinson, Jr., of Charleston, S. C., and brother have about decided to erect the fertilizer factory recently noted. Site for the plant is now being sought.

Spartanburg—Knitting Mills.—A company with capital stock of \$10,000 has been formed and applied for charter. A plant will be established at once for knitting.

Union—Knitting Mill.—The Excelsior Knitting Mills Co., reported last week as incorporated, will establish plant at once. E. Nicholson is president.*

TENNESSEE.

Bigbyville—Telephone System.—It is proposed to form a company to connect Bigbyville by telephone with the Citizens' Exchange at Columbia, Tenn.

Chattanooga—Knitting Mill.—E. G. Richmond, R. W. Barr, Garnett Andrews, J. S. Bell and others have organized the Chattanooga Knitting Mill Co. for the purpose of establishing a knitting mill for hosiery.

Friends' Station—Zinc Mines and Mills.—J. E. Gardner has found valuable deposits of zinc on his property and will develop same, erecting fifty horse-power mill for turning out blends.

Knoxville—Marble Quarries and Mills.—The T. S. Godfrey Marble Co. has been incorporated, with capital stock of \$50,000, by T. S. Godfrey, J. E. Hart, J. E. Willard and others, to continue the business of T. S. Godfrey, of Stennett Marble Co., and of Gray Knox Marble Co. The company is now

only quarrying, but has privilege to saw and finish marble, etc.

TEXAS.

Beaumont—House Factory.—Boyd & Vinson have established a factory for the manufacture of ready-made houses. A complete equipment of the latest improved machinery for the purpose has been installed.

Dallas—Machinery House.—The Briggs Machinery & Supply Co. will be organized to establish a depot for machinery of all kinds. C. H. Briggs will lead the company. Some lines of machinery have as yet not been arranged for, and correspondence is invited.

Elgin—Coal Mines.—C. Lasker's coal mines near Elgin are being rapidly developed and will be pushed to a daily output of 800 tons, a complete mining plant having been installed.

Hempstead—Electric-light Plant.—For information regarding electric-light plant, address Amster Bros., whom, we are informed, are interested.

Jacksonville—Cotton Compress.—J. R. Erwin, of Overton, Texas, and others have bought the Calvert cotton press and will remove it to Jacksonville.

Orange—Gin and Press.—L. M. Lewis will add a gin and press to his cane mill.

San Antonio—Furniture Factory.—Chartered: The Craig Furniture Co., with capital stock of \$30,000, to deal in and manufacture furniture; incorporators, C. M. Williams, R. B. Craig and W. E. Ware.

Shiner—Oil Mills.—The Shiner Oil Mill & Manufacturing Co., recently noted as incorporated, has its plant now in course of erection; contract let to Stilwell-Bierce & Smith-Valle Co., of Dayton, Ohio, for 24-ton plant.

Van Alstyne—Electric-light Plant.—McKinney & Man will increase the number of their lights from plant of twenty-five to 100.

Yoakum—Oil Mill.—The Yoakum Cottonseed Oil Co. has been incorporated, with a capital stock of \$15,000, to manufacture cottonseed oil, by J. M. Bennett, of San Antonio; A. G. Wangeman and Charles A. Kessler.

VIRGINIA.

Basic City—Iron Manufacturing, etc.—Chartered: The Virginia Iron Investment Co., for purpose of manufacturing iron, erecting buildings, etc., with capital stock placed at \$50,000; J. W. White, president; Spencer P. Hazard, secretary, and Robert J. Ringwalt, treasurer, all of Philadelphia, Pa.

Manchester—Electric-light Plant.—The city council committee continues to investigate as to the advisability of the city erecting and operating its own electric-light plant. Address the mayor.

Ontario—Saw and Grist Mill.—Miles Cary has purchased the Bon Air mill at Keyesville, will remove same to Ontario and operate as saw and grist mill.

Staunton—Steam Laundry.—James Cotton has established a steam laundry.

West Point—Wharf, etc.—It is stated that the Cincinnati Fish & Oyster Co. will build wharf and building, costing about \$100,000.

WEST VIRGINIA.

Clarksburg—Water Works.—The city has voted affirmatively as to the proposed issuance of \$10,000 in bonds for the improvement of the water works. Address the mayor.

Piedmont—Electric-light Plant.—There is talk of the erection of an electric-light plant. Address the mayor.

West Virginia—Coal Mines.—The Messrs. Ranson, of Staunton, Va., are conducting surveys of a large body of coal and timber land in West Virginia for New York parties who contemplate purchasing same for development.

BURNED.

Ashland, Va.—The Woodson Hotel; loss \$6,000.

Charleston, W. Va.—H. Ray's broom factory; loss \$400.

Coan, Va.—T. H. Fallin's cannery.

Dayton, Tenn.—The Dayton City Hotel; loss \$20,000.

Friar's Point, Miss.—The Delta Veneer & Box Co.'s plant; loss \$100,000.

Maysville, Ky.—W. B. Matthews & Co.'s lumber mill; loss \$10,000.

McComb, Miss.—N. P. Johnson's cotton gin.

St. Louis, Mo.—The Crescent Furniture Co.'s factory damaged to extent of \$10,000.

Temple, Texas.—The National Steam Laundry; loss \$2500.

Willis, Texas.—J. M. Walker's saw mill.

BUILDING NOTES.

Abbeville, Ga.—Hotel.—Golucke & Stewart, of Atlanta, have completed plans for the hotel previously noted as to be built by Mrs. J. M. Morris; to be equipped with elevators, steam or hot-water heat, bathroom outfits, electric fixtures, etc., and costing about \$100,000.

Atlanta, Ga.—Hotel.—The Markham Hotel Co. has about decided definitely to rebuild its hotel recently burned. A new building is proposed, eight stories high, steel and iron framework. Address care of Daniel O. Dougherty.

Atlanta, Ga.—Office Building.—Bradford & Gilbert will prepare plans for an office building, to cost \$180,000 or more; to be equipped with every latest improvement; A. H. Benning, superintendent.

Baltimore, Md.—School.—Contract for erection of city school building let to Adam R. Shipley at \$27,354.

Baltimore, Md.—Car Barn.—The City & Suburban Railway Co. has let contract to Wm. Ferguson & Bro. at \$75,000 for the erection of a car barn.

Baltimore, Md.—Dwellings.—David E. Potter has bought site for \$20,000 and will build dwellings.

Charlotte, N. C.—Business Buildings, etc.—Charles C. Hook is preparing plans for a three-story brick building for W. F. Dowd, two-story brick for D. Rigler, store and apartment building for Charles Barnhardt.

Chattanooga, Tenn.—University Buildings.—Contract for erecting the new Normal University buildings has been awarded to G. H. Callins & Sons at \$9831.

Cumberland, Md.—Joseph Fauber & Son have contracted with Hewitt Bros. for erection of three three-story brick buildings.

Cynthiana, Ky.—Store.—Des Jardins & Hayward have prepared plans for a store building for J. G. Montgomery.

Covington, Ky.—Dwelling.—James W. McLaughlin has made plans for a dwelling for Mrs. Morton.

Eastman, Ga.—Stores.—W. H. Clements, of Scotland, Ga., will build two large stores in Eastman.

Eckington, Ky.—Peter Davis has let contract to George Myers for the erection of a 17-room hotel.

Harrodsburg, Ky.—Hotel.—James Shuttleworth will repair his burned hotel.

Jacksonville, Fla.—Office Building.—B. D. Gardner, of Chicago, Ill., has about decided to build an office building, six stories high, with steel frame work, to cost from \$75,000 to \$100,000. Henry I. Cobb, of Chicago, will prepare the plans.

Knoxville, Tenn.—Asylum.—S. G. Heskell, trustee of State Insane Asylum, plans to secure the appropriation of \$25,000 for erecting additional buildings.

Lake Charles, La.—Church.—Contract has been awarded to McKnight Bros., of Hallettsville, Texas, for the erection of an Episcopal church at \$16,000.

Leitchfield, Ky.—Courthouse.—The county court has accepted plans by M. Q. Wilson, of Louisville, for the new proposed \$4000 courthouse.

Louisville, Ky.—Depot.—It is said that the Illinois Central Railroad Co. will build a big freight depot in Louisville; S. Fish, president, No. 1 Park Row, Chicago.

Lynchburg, Va.—Temple.—The Hill City Masonic Temple Co. has decided to erect its building at once; E. G. Frye, architect.

Lynchburg, Va.—Hall.—Hill City Lodge, A. F. and A. M., will erect a three-story brick building to be used as a home; building will be faced with buff brick and trimmed with stone and terra cotta, with galvanized-iron cornices, and will contain a lodge room, banquet hall, social hall and library; building and furnishings will cost \$14,000; H. P. Woodson, chairman building committee; E. G. Frye, architect.

Montgomery, Ala.—Depot.—The Louisville & Nashville Railroad Co. has let contract to Dodson & Co., of Atlanta, Ga., at \$32,000, for the erection of the new freight depot. Contract for constructing the underpass was let to Cook & Laurie, of Montgomery, at \$13,000.

Montgomery, Ala.—Coliseum.—It is proposed to build a coliseum to cost in the neighborhood of \$10,000. J. J. Ross is interested.

Montgomery, Ala.—Natorium.—Penley & Armstrong have contract to build the Natorium Co.'s building.

New Orleans, La.—Johnson & Son have permit for \$17,000 four-story building; American Homestead Co. for \$3175 building.

New Orleans, La.—Depot.—It is said that the Louisville & Nashville Railroad will

make extensive improvements to its New Orleans depot; J. G. Metcalfe, general manager, Louisville, Ky.

Norfolk, Va.—Hospital.—The Retreat for the Sick (J. L. Roper, president trustees,) will erect a new \$50,000 building.

Norfolk, Va.—Hotel.—T. F. Rogers is given as authority for the statement that an eight-story brick hotel building, to cost \$750,000, will be erected by Northern capitalists. It is reported that all arrangements have been completed for a site and that the erection of the hotel is assured.

Paris, Ky.—Warehouse.—Charles S. Brent & Bro. will build a warehouse.

Parkersburg, W. Va.—Dwelling.—George F. Barber & Co., of Knoxville, Tenn., have prepared plans for a \$5000 dwelling for Mrs. R. L. Neal.

Roanoke, Va.—Office Building.—It is announced that work is about to commence on the new Norfolk & Western Railroad office building; J. C. Nesbitt, of Harrisonburg, Va., contractor. The structure will be five stories high, 53x180 feet.

Sedalia, Mo.—The Knights and Daughters of Labor have decided to build a home in Sedalia; J. H. Jenkins, superintendent.

St. Andrew's Bay, Fla.—Jail.—The board of county commissioners will receive bids for the erection of a jail after plans and specifications now ready; W. B. Galner, chairman.

Stillmore, Ga.—Stores, etc.—Harry Hudgins has closed contract with George M. Brinson for building brick storehouse, four offices, etc.

Turner, Ark.—Dwelling.—George F. Barber & Co., of Knoxville, Tenn., have furnished plans to L. Hall for a \$4000 dwelling.

Water Valley, Miss.—College Buildings.—New buildings will be erected for Hamilton College, now at Byhalia. Address the trustees at latter city.

Water Valley, Miss.—Courthouse.—The county will soon commence work on the erection of a \$30,000 courthouse. Address the county clerk.

Westminster, Md.—Hall.—A hall for Western Maryland College will be built; Jackson C. Gott, of Baltimore, architect.

Wheeling, W. Va.—Depot.—It is stated that the Baltimore & Ohio Railroad Co. (John K. Cowen and Oscar G. Murray, receivers, Baltimore, Md.) intends to build a passenger depot in Wheeling.

Wilson, N. C.—Dwelling.—George F. Barber & Co., of Knoxville, Tenn., have furnished plans to A. P. Branch for a \$3500 dwelling.

Winchester, Va.—Dwelling.—George F. Barber & Co., of Knoxville, Tenn., have furnished plans to Mrs. Wm. Lupton for a \$3500 dwelling.

RAILROAD CONSTRUCTION.

Steam Railways.

Baltimore, Md.—The B. & O. R. Co. has asked permission to issue \$650,000 in certificates for improvements on the Pittsburg & Connellsville line. They include five miles of sidings at Connellsville, Pa.; also a number of second and third tracks to the main line, new steel bridges, an engine-house and machine shops and new terminals at Pittsburg. John K. Cowen and Oscar G. Murray are receivers.

Concord, N. C.—It is reported that a plan is now being discussed to extend the Moore County Railroad, extending from Aberdeen, N. C., towards Concord, to that place. T. Gerrish, who is said to represent a syndicate from Boston, Mass., is interested in the matter; also W. B. Eekhout, of Aberdeen, N. C., general manager of the Moore County road. The new line would connect Concord with the Seaboard Air Line.

Concord, N. C.—The proposed railroad from Concord to the Seaboard Air Line, by the way of Aberdeen, N. C., would be about forty-three miles long, traversing Cabarrus and Montgomery counties. Vice-President St. John, of the Seaboard Air Line, advises the Manufacturers' Record that as yet nothing definite has been done towards constructing this line.

Florence, Ala.—It is reported that J. F. Montgomery, of Taunton, Mass., owner of the Florence Belt Railroad, will extend the line and make other improvements to it.

Glendon, N. C.—It is reported the Durham & Charlotte Railroad Co. has purchased the Glendon & Gulf road and will extend it to Charlotte as soon as possible. The Glendon & Gulf road is about twenty miles in length. It has been owned by the Glendon & Gulf Manufacturing Co., of which Frank D. Jones, of Glendon, is superintendent, and John B. Leming, of Bridesbury, Pa., president.

Heartpine, Ga.—Prest. J. W. Oglesby, of the South Georgia Railroad Co., writes the Manufacturers' Record that rails and rolling stock have been purchased, and it is expected to complete the grading of the entire line within thirty days. The bridge work is nearly completed also. It is hoped to have the road in operation about September 15.

New Orleans, La.—The New Orleans & Western Company is considering the idea of making a double-track road of its line between New Orleans and Port Chalmette. Charles E. Levy is president.

Smithton, Ark.—The Southwestern Arkansas & Indian Territory Railroad, now being extended by Hon. J. A. Woodson, of Little Rock, Ark., receiver, will be completed to Pike City about September 1.

Wilmington, N. C.—About six miles of the Carolina, Tennessee & Ohio line, between Southport and Wilmington, have been graded and several bridges are now being constructed. Frank H. Blodgett, whose present headquarters is at Wilmington, is general contractor, and Walter G. McRae, chief engineer. The road will be twenty-six and one-fifth miles long.

Electric Railways.

Augusta, Ga.—The Augusta Railway Co. has determined to change several of its trolley lines in the city. D. B. Dyer may be addressed.

Baltimore, Md.—The City Passenger Railway Co. has awarded Frank H. Sloan, Equitable Building, Baltimore, the contract to change its Ann-street division to a trolley line.

Chester, W. Va.—The electric railroad line which is to be built between East Liverpool, Ohio, and Chester, W. Va., is being promoted by J. E. McDonald, of East Liverpool, and others. It will cross the Ohio river on a steel bridge 2000 feet long.

Stewartstown, Md.—Among those interested in the proposed electric road between Stewartstown and Delta, Pa., are Thomas P. McKenzie, of Baltimore; John B. Gemmill, of Stewartstown, and Charles A. Hawkins, of York, Pa.

Street Railroads.

Baltimore, Md.—It is stated that the Central Passenger Railway Co. is now considering the use of compressed-air motors upon its entire system. If tried, the motors will probably be used upon the section to be built in East Baltimore first. It is stated that the motor recently tested on the Third Avenue Railway Line, in New York, will be adopted, if any. George Blakiston, corner South and Lombard streets, is president of the company.

Wheeling, W. Va.—It is reported that the Wheeling Suburban Railway Co. may use compressed-air motors in place of the trolley system on its line recently built. Anton Reymann is one of the directors.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Belting, etc.—See "Tilling Plant."

Belting, Pulleys, etc.—Charles S. Brent & Bro., Paris, Ky., will buy pulleys, shafting, belting, etc.

Bicycle-rims Machinery.—C. W. Sprinkle, Pennsboro, W. Va., wants prices on machinery for making wood rims for bicycles.

Boiler.—C. H. Long, Pocomoke City, Md., wants to buy a new or second-hand return-tubular boiler, 16x54—15x54, sixty horse-power.

Boiler and Engine.—P. Poulsen, Powhatan, Md., wants to exchange for fifteen horse-power engine and boiler.

Boiler and Engine.—Wanted, a 100 horse-power boiler and an eighty horse-power engine. Address P. O. Box 581, Baltimore, Md.

Boiler and Engine.—R. A. Raney, Faith, N. C., will buy a large engine and boiler for gin.

Boiler and Engine.—The Stevenson Wrench Co., Northeast, Md., wants a thirty-five to fifty horse-power engine and boiler.

Brick Machinery.—See "Tiling Plant."

Bridges.—The board of supervisors of Grenada county, Miss., will contract for the construction of two iron bridges over creeks. Address J. C. Perry, clerk, Grenada, Miss.

Canning Machinery.—The Green Cove Springs Canning Co., F. H. Hafer, manager, Green Cove Springs, Fla., wants descriptions and prices on canning equipments.

Chaser Mill and Crusher.—Wanted, a chaser mill (large size), four pairs of millstones and one stone crusher. Address P. O. Box 581, Baltimore, Md.

Corn Mill.—B. F. Halls, Georgetown, Tenn., wants to buy a corn mill.

Cotton-mill Machinery.—The South Carolina Braiding Co., Cheraw, S. C., is in the market for a balling machine to ball spindle banding in balls fourteen inches in diameter; also a rope-finishing machine; E. A. Palmer, president.

Crushing Machinery.—See "Tiling Plant."

Crushing Mills.—See "Zinc Mills."

Electric-light Machinery.—The West Point Manufacturing Co., West Point, Ga., is in the market for a dynamo and 600 incandescent lamps.

Electric-light Plant.—The Magnolia Gin & Light Co., Magnolia, Miss., wants bids on electric-light machinery.

Engine.—See "Tiling Plant."

Engine.—See "Saw Mill."

Fire Apparatus.—The Western Enterprise Hose Co., Hagerstown, Md., will buy a \$500 hose wagon, etc.

Fire-proof Vault Materials.—R. D. Fleming & Co., Warrenton, N. C., want to buy frame and doors for fire-proof vault about six and one-half feet high and four and one-half feet wide.

Flour-mill Machinery.—Charles S. Brent & Bro., Paris, Ky., will buy some of the machines ordinarily put in a flour mill.

General Machinery.—The Briggs Machinery & Supply Co., Dallas, Texas, C. H. Briggs, manager, wants to arrange for handling certain lines of general machinery.

Ice Plant.—The Magnolia Gin & Light Co., Magnolia, Miss., wants bids on ice machinery.

Iron and Steel Goods.—L. T. Brown, Box 135, Radford, Va., wants to buy iron castings and steel springs for the manufacture of farm and freight wagons.

Knitting Mills.—The Excelsior Knitting Mills, Union, S. C., will buy equipment for mills. Address E. Nicholson, president.

Machine Tools.—The Stevenson Wrench Co., Northeast, Md., is in the market for two plain milling machines (geared), one medium-sized shaper, one 15 to 18-inch lathe, small drill press, one heavy nut tapper, pulleys, shafting, hangers, thirty-five to fifty horse-power engine and boiler, etc.

Manufacturers of Bicycle Supports.—E. J. McKinley, Blackshear, Ga., wants to correspond with manufacturers with a view to contracting for manufacture of bicycle supports, or selling patents of same outright.

Mill Seat.—J. Wyatt, Faith, N. C., wants to buy a mill seat to run by water-power.

Planing Mill.—A. L. Pippin, Elizabeth, Miss., wants to buy a small planing mill.

Printing Presses.—H. A. Garrett, St. Joseph, La., wants to buy a cheap Vaughn ideal cylinder hand press or a second-hand Washington hand press sufficient for seven-column paper.

Railway Equipment.—Ferriss & Knapp, White Bluffs, S. C., want to buy four or five tons of light rails, about sixteen pounds per yard; second-hand will do.

Railway Equipment.—Poulter & Co., Bullitt Building, Philadelphia, Pa., want prices on 100 or 200 tons of 30-pound relay steel rails and same quantity of 40-pound rails; also five standard-gage box cars.

Railway Equipment.—Wanted, about 110 tons of 35-pound relaying rails, steel or iron, in good condition. State lowest price delivered at Smithton, Ark., immediate shipment. Address J. A. Woodson, receiver, Little Rock, Ark.

Railway Equipment.—The John G. Hurkamp Co., Fredericksburg, Va., wants an engine, good second-hand, standard-gage, to operate on spur track for switching purposes; also wants several second-hand standard-gage flat cars, in good order, for handling freight.

Roofing.—C. H. Long, Pocomoke City, Md., wants to buy corrugated iron for roofing and siding.

Saw Mill.—W. B. Matthews & Co., Maysville, Ky., will want a saw mill and engine, either new or second-hand, hand or circular.

Shingle Mill.—Wanted, complete equipment for shingle mill, second-hand, in good order,

and at low price. Address S. Box 752, Ocala, Fla.

Steam Roller.—Poulter & Co., Bullitt Building, Philadelphia, Pa., are in the market for a good second-hand steam roller.

Telephone Equipment.—The Bosque County Telephone Co., Morgan, Texas, wants bids on telephone equipment of all kinds; J. M. C. Tandy, president.

Tiling Plant.—J. D. King, Winchester, Ky., will need line shafting, belting, engine, stone crusher, mixing machine, terra cotta press, etc.

Tobacco Machinery.—M. Encimoral & Co., Coconut Grove, Fla., want to buy cigar presses and gauges.

Water Works.—The city of Richmond, Mo., will soon be in the market for pipe, standpipe, etc.; W. T. Shoop, mayor.

Woodworking Machinery.—W. B. Matthews & Co., Maysville, Ky., will want woodworking machinery.

Woodworking Machinery.—C. W. Sprinkle, Pennsboro, W. Va., wants prices on machinery for making wood rims for bicycles.

Woodworking Machinery.—B. F. Halls, Georgetown, Tenn., wants to buy a pony planer, matcher and corn mill.

Woodworking Machinery.—R. D. Harper, Scooba, Miss., wants to buy woodworking machinery.

Zinc Mills.—J. E. Gardner, Friends' Station, Tenn., will want to buy crushers, rolls, jigs, power, etc., for zinc mill.

TRADE NOTES.

A market for 110 tons of 35-pound relaying steel or iron rails is shown in the card, published in our advertising columns, of J. A. Woodson, Little Rock, Ark. They are to be in good condition and to be delivered at Smithton, Ark.

The Davis & Egan Machine Tool Co., of Cincinnati, Ohio, at a recent meeting of the board of directors, declared a dividend of 3 per cent. for the past three months. An unusually good business is reported, July sales being the largest of any month this year.

An opportunity to lease a saw and planing mill at Smithton, Ark., is offered by the card of J. A. Woodson, Little Rock, Ark. The mill can be moved to the end of a new railroad, and then will be accessible to about 3500 acres of fine oak and pine timber.

S. Morgan Smith, manufacturer of the McCormick and Success water-wheels, York, Pa., was lately awarded a contract by the Monbo Manufacturing Co., of Monbo, N. C., for two 51-inch vertical turbines, together with gears, shafting, rope wheels and fire pump, for use in the new cotton mill which this company is building.

A new and valuable deposit of clay, possessing superior fire-proof qualities, has been secured by the Pomona Terra Cotta Co., Pomona, N. C. This concern lately completed a new plant built especially for the manufacture of sewer pipe and fire-brick. Its equipment of machinery is up-to-date in every respect. A specialty is made of fire-brick for boiler furnaces for cotton mills and factories of all kinds.

The Jeffrey Manufacturing Co., of Columbus, Ohio, has taken up the manufacture of the Robinson patented coal-washing machinery. There are many in daily use in this and foreign countries, and it is conceded to be a most efficient and simple washer. Points of special advantage are: Simplicity, compactness, low cost of installation, low cost of operation, economy in the use of water, and its washing of coal that is not closely sized.

A powerful dredge, especially built for dredging very hard material, is offered for sale by F. Brotherhood, receiver, 53 Hayne street, Charleston, S. C. It is used to dredge phosphate rock, but can be readily converted for ordinary dredging purposes, working in from ten to forty-two feet of water. A collection of machinery, including equipment for phosphate-rock works, is also offered for sale. The list is worthy of examination by inquirers for machinery.

Contract for installing two 60-kilowatt Eddy generators, with Russell engine, has been awarded by the city of Bloomfield, Iowa, to the Western Electrical Supply Co., 10 and 12 North Ninth street, St. Louis, Mo. This company is also installing a 17-kilowatt direct-connected Eddy generator and engine in the Consumers' Brewery, at St. Louis. Both of these plants are designed according to the best standards of efficiency. In awarding the contracts such features were the most weighty considerations. It is a

decided compliment to the high character of the Western Company's work to be selected to carry out these installations.

An order from the Stamford (Conn.) Gas & Electric Co. for about 115 feet of 50-inch double belting has been received by Charles A. Schleren & Co., New York city. This firm also has a contract from the American Sugar Refining Co., Brooklyn, N. Y., for about 115 feet of 50-inch three-ply belting. Such orders as these indicate the recognition which this concern's high-grade leather belting is continually receiving. A large demand for its products is to be noted at present.

Hon. J. A. Woodson, of Little Rock, Ark., receiver of the Southwestern Arkansas & Indian Territory Railroad, writes the Manufacturers' Record that an excellent opportunity is offered to saw-mill men to secure a plant on the line of this road. It traverses a tract estimated to contain 40,000 acres of pine and oak timber, and the mill, which is now in operation on the line of the road, can be moved to the centre of the tract if desired. Anyone interested may address Mr. Woodson.

About August 1 was the time set for the opening in Dallas, Texas, of a new machinery and supply business, under the name of the Briggs Machinery & Supply Co. Mr. C. H. Briggs, lately of the firm of Briggs, Young & Co., will be at the head of this concern. He and his associates have had a large experience in this business, and are extensively acquainted in the State and surrounding territory. We are informed that the stock was not yet purchased and some lines not arranged for, and the concern is open for same at this time.

With the purpose of affording the best facilities to a large area of the South for obtaining the latest developments in wood-working machinery, the J. A. Fay & Egan Co., of Cincinnati, Ohio, has located one of its most practical men at Atlanta. Mr. Charles A. Gilbert, who has taken up this work, is located at 36 West Alabama street, in that city. Under this arrangement the intending buyer is in direct touch with a great machinery-building concern, whose experience and well-qualified experts are keeping its machines in advance of requirements.

The works of the Phosphate Mining Co., near Port Royal, S. C., will be sold. This property includes about twenty-four acres of land. It has a river frontage of 971 feet, with fine wharves, and is convenient for ocean steamers. From this place have been successfully navigated steamers loaded to twenty-one feet six inches. The Port Royal & Augusta Railroad passes through the property. On the property are desirable warehouses, boiler-house, dwelling-houses and an abundant artesian-well-water supply. As a site for a cotton mill or other factory, or for warehouse or ocean-shipment purposes, the property claims special attention. F. Brotherhood, receiver, 53 Hayne street, Charleston, S. C., can be addressed.

The well-known establishment at Louisville, Ky., of the Enterprise Brass Manufacturing Co. has changed ownership, and by the addition of several of the latest improved machines the works have been made more complete in every detail and better equipped than heretofore. This firm continues under the same name with H. Conrad, president; J. E. Conrad, secretary and treasurer, and J. Kippert, manager. It is now ready to take orders of every description in its line of brass goods for brewers, distillers, packing-houses, plumbers, steam and gas fitters, tobacco works, tanneries, woolen mills, machine shops, wholesale supply houses, hardware stores, etc. A specialty is made of model castings and repairs of all kinds in brass or machine works.

TRADE LITERATURE.

Ornamental designs in wrought-iron fences are shown by catalogue 25, issued by the Ludlow-Saylor Wire Co., 114-116 South Fourth street, St. Louis, Mo. It shows a number of novelties and gives practical advice on the construction of fences.

"Printed Suggestions" is the title of a pertinent pamphlet for the house-owner issued by Gara, McGinley & Co., 23 South 17th street, Philadelphia, Pa. Hints as to the proper material, construction and care of the roof are given. Facts as to the art and utility of sheet metal are also set forth. It is attractively illustrated.

A directory of the wholesale grocers, canners and packers of the United States and Canada is issued by George F. Lasher, Phil-

adelphia, Pa. This is the fourth annual appearance of this directory, and it is revised and corrected to July 1, 1896. The usefulness of this publication to dealers and buyers in general, as well as the trade interests it covers, make it a valuable book.

Keeping in the vanguard of improvements in woodworking machinery, Josiah Ross, the well-known Buffalo (N. Y.) manufacturer, is already out with a catalogue for 1897. This publication displays changes and new productions that will interest users of this class of machinery. A variety of machines is shown, many of which have especial features commending their use to practical men.

The season of the year is rapidly approaching when the subject of heating, ventilation and sanitary apparatus attracts especial attention. Too much emphasis cannot be placed upon the importance of this subject, which only in recent years has been properly appreciated. Some valuable information in this direction is given in a pamphlet issued by the Peck-Hammond Co., Cincinnati, Ohio. Enjoying the advantage of a long experience in this work, the company is an authority on the subject, and its apparatus a recognized standard of perfection. Churches, school buildings, public buildings, office buildings, residences, etc., of the most expensive construction, are using its apparatus, and architects and engineers accord to it flattering commendation.

A catalogue describing the Linde ice and refrigerating machines has been issued. These machines attracted much attention at the World's Fair, receiving a medal and diploma. They are of the ammonia compression type. The distinguishing feature lies in the construction of the ammonia compressing pump and the condition of the anhydrous ammonia while being compressed. In the award made by the World's Fair judges comment is made upon the advantages of these machines. Recognition of these points is given as follows: "Construction of apparatus and finish first-class in every respect; simplicity of mechanism enables machine to be safely operated at unusually high speed of rotation in proportion to cubical contents of compressing cylinder; large refrigerating capacity available from comparatively small weight and size of compressing apparatus. For refrigerating apparatus of ammonia compression type: For first-class construction, finish, efficiency and reliability; operated with horizontal double-acting compressor of simple construction, requiring no water jacket, and affording maximum refrigerating capacity with minimum weight of machinery." The catalogue which is issued by the manufacturer, the Fred. W. Wolf Co., 139-143 Rees street, Chicago, Ill., gives in detail the various features of the Linde machines. It also gives much useful information on the subject of refrigeration.

Two catalogues of interest to wide-awake power users have been issued by the S. Morgan Smith Co., of York, Pa. Both show valuable improvements in water-wheels. One is devoted to the "New Success" turbine, and the other illustrates and describes McCormick's turbine. The general inquiry for definite information on the subject of water-wheels makes the appearance of these two pamphlets timely. The demand for a superior turbine is greater now than ever before. Many streams that once afforded an abundant supply of water for the factories and mills located along their banks are no longer adequate to the demands made upon them. Turbines once thought to be economical in the use of water are now found to be quite wasteful, and must give place to wheels of more modern design. The wheels made by the Smith Company embody many distinctive features. Its product has a world-wide reputation, and these wheels have accomplished some remarkable results in economy and efficiency.

Railroad Contractor Wanted.

Correspondence is invited from a railroad contractor who can construct and complete forty to fifty miles of railroad, carrying the enterprise not longer than twelve months, with absolute security for full payment after the completion of the line. The most thorough investigation invited from contractors able to undertake the enterprise. Address F. N. B., care of Manufacturers' Record.

Among the recent successful bidders for coal for the Navy Department at Washington were the Davis Coal & Coke Co., of West Virginia, and M. Fairfield, representing the George's Creek coal-fields. The Davis Coal & Coke Co. secured most of the tonnage.

WHAT THE PEOPLE THINK.

Letters About the New Orleans Edition of the Manufacturers' Record.

Andrew R. Blakely & Co., proprietors New St. Charles, New Orleans, La.: "We are very well pleased with the copy of the New Orleans issue of the Manufacturers' Record, and think it should do a great deal of good for the South, as it has been so well circulated."

James Stewart & Co., engineers and contractors, New Orleans, La.: "After reading the New Orleans edition of the Manufacturers' Record, we see so many points of interest that your correspondents are to be congratulated on the mass of matter embodied in such shape that any intelligent reader can appreciate what you have done for the Crescent City in that issue. I have met a number of the leading business men since the publication of the edition, and have not found a critic who has anything adverse to say on the New Orleans edition."

American Machinery for Krupp.

The Brown Hoisting & Conveying Machine Co., of Cleveland, Ohio, through its general Eastern office, Havemeyer Building, New York, has just received an order from Fried Krupp at Essen, Germany, for a complete hoisting and conveying plant for their blast furnace at Rheinhausen. This plant consists of three standard Brown overhead bridge tramways, to be operated by electricity, each machine having independent winding drums and electric motors. The Brown Hoisting & Conveying Machine Co. is to furnish all the working parts, including the sheaves, engines, motors, hoisting and conveying machines, etc.; in fact, everything but the bridges proper, which will be built in Germany, the Brown Company sending a man abroad for that purpose. There will be three Elwell-Parker motors used, of about sixty horse-power each. The entire plant is to be in operation during the early part of 1897.

Steam Yachts and Marine Machinery Built by Marine Iron Works, Clybourn and Southport avenues, Chicago. Free illustrated catalogue. Write them for it. †

High Telephone Rentals

May be avoided by using our City Telephone Exchange System; many in use; also Factory and Short Line Systems complete. Write us. Scott Bros. Electric Co., Detroit, Mich. †

\$3.00 to Atlantic City and Return Without Change of Cars via Pennsylvania Railroad and the New Delaware River Bridge Route.

Special trains will be run through in each direction without change of cars, thus avoiding transfer through Philadelphia, leaving Union Station, Baltimore, 12.15 midnight, Saturdays, August 1, 8, 15 and 22, and arriving at Atlantic City in time for breakfast Sunday morning; returning, leave Atlantic City 6 P. M. Sunday.

Personally-Conducted Tours to the North via Pennsylvania Railroad.

The best and most convenient method of pleasure travel is to participate in the Pennsylvania Railroad Co.'s personally-conducted tours, as under this system the lowest rates are obtained, both for transportation and hotel accommodation, and none but the best hotels are used. An experienced tourist agent and chaperon accompany each tour to look after the comfort of the passengers. The tours take in Watkins Glen, Niagara Falls, Thousand Islands, Montreal, Quebec, Au Sable Chasm, Lakes Champlain and George, Saratoga, and a daylight ride down through the highlands of the Hudson, July 23 and August 18. Rate, \$100 for the round trip from Baltimore and Washington, covering all expenses of a two weeks' trip. Itineraries furnished on application at ticket office of the company.

\$4.00 to Atlantic City and Return via Pennsylvania Railroad.

Excursion tickets, good going on 10.55 and 12.05 noon trains, Fridays and Saturdays, good to return until Tuesday, inclusive, \$4 for the round trip.

\$10.00 to Niagara Falls and Return via Pennsylvania Railroad.

Special excursion train will leave Baltimore, Union Station, 8.45 A. M. July 23, August 6 and 20, September 5 and 17, consisting of Pullman parlor cars and day coaches, accompanied by tourist agent and chaperon. Excursion tickets, good for return passage on any regular train, exclusive of limited express trains, within ten days, permitting stop-over at Watkins and Rochester in each direction and at Buffalo returning, within limit. Reservations in parlor cars can be made on application to company's ticket agents.

A Handsome Book for a Two-Cent Stamp—New Publication by the D. & C. Line.

To those who contemplate taking a summer outing, we will mail for two cents postage our illustrated pamphlet, which contains a large number of fine engravings of every summer resort between Cleveland, Toledo, Detroit and picturesque Mackinac. It has many artistic half-tones of points of interest of the Upper Lake region, information regarding both short and extended tours, costs of transportation and hotel fare, etc. Address A. A. Schantz, G. P. A., Detroit, Mich.

THROUGH WONDERLAND.

Personally-Conducted Tours to Yellowstone Park via Pennsylvania Railroad.

The Yellowstone Park is one of the most wonderfully attractive regions of the world. Its beauties of scenery, the wild grandeur of its mountains and canons, compel the admiration of every visitor, while its phenomenal geysers and curious mineralogical formations make it a rich field for the investigation of the scientist. Universal interest attaches to it, and in order that the natural desire to visit it may be accomplished in the most satisfactory manner, the Pennsylvania Railroad Co. has arranged for a tour, covering a period of sixteen days, leaving New York and Philadelphia, Thursday, August 27.

As the tour will be run under the personally-conducted tourist system inaugurated by the above-named company, it is hardly necessary to give the assurance that it will be arranged in the most complete manner. It might be well to state, however, that no other means of seeing the park thoroughly is comparable to that afforded by a well-ordered personally-conducted tour.

A special train, consisting of a dining, Pullman vestibule drawing-room sleeping, compartment and observation cars, which will be the best that can be secured, will be provided, in which passengers will live en route, and whenever the journey is broken the choicest rooms in the leading hotels will be reserved for the use of the tourists, for which regular rates are paid, so that the guests, although members of a party, enjoy all the privileges of individuals who may have made their own selections.

The party will be conducted throughout by a tourist agent especially selected for his ability and experience, with chaperon to look after the comfort of lady passengers.

The rate, covering every necessary expense, will be \$210 from Boston, and \$200 from New York, Philadelphia, Baltimore, Washington and Harrisburg; proportionate rates from other points.

Detailed itinerary will be sent on application to Tourist Agent, 205 Washington street, Boston; 1196 Broadway, New York; 860 Fulton street, Brooklyn, or Room 411, Broad Street Station, Philadelphia.

We Are the People

referred to in a published letter as building an antiquated type of Babcock & Wilcox boiler.

Better send to us for specification and see.

THAYER & CO., Inc.
Tremont Building, Boston, Mass.
Drexel Building, Philadelphia, Pa.
Taylor Building, 39 Courtlandt street, New York City.

FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters. Items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

No advertisements but those of a financial character will be accepted for the following page.

In the last issue of the Manufacturers' Record was published "A Fable," by A. E. Stilwell, president of the Missouri, Kansas & Texas Trust Co., of Kansas City. We have since learned that this was copyrighted, which should, of course, have prevented its publication in full. Its unauthorized publication is forbidden by the copyright laws.

Southern Bank Changes.

The recent bank changes in the South are as follows: Third National Bank of Atlanta, H. M. Atkinson, vice-president; First National Bank of La Grange, Texas, A. Hardusek, president, J. Lane, vice-president; Provident National Bank of Waco, Texas, J. K. Rose, vice-president; National Bank of Denison, Texas, J. J. McAlester, vice-president; First National Bank of Hearne, Texas, L. W. Carr, president, Edwin Wilson, vice-president; National Bank of Virginia, Richmond, Va., L. Z. Morris, vice-president.

New Corporations.

The Bank of Melbourne, Ark., recently organized, will have a capital stock of \$10,000. B. E. Massey is president.

The Delta Building and Loan Association has organized a branch at St. Francisville, La., with J. R. Matthews as president.

The Metropolitan Building and Loan Association has organized a branch at Staunton, Va., with \$25,000 capital. W. P. Tams is president, and F. P. Berkeley, secretary and treasurer.

The Register Permanent Building, Loan and Savings Association has been incorporated at Baltimore by Clinton P. Parker, Millard F. Thomas, Bernard H. Nossel, Kurt R. Sternberg, Robert N. Carnan, Henry R. Bormann, Gustav A. Setzer and Campbell Carrington. The capital stock is \$500,000.

New Securities.

The town of Richmond, Mo., has voted to issue \$45,000 in bonds for water works. Address W. T. Shoop, mayor.

G. R. Page, Clarkdale, Miss., will receive bids until October 1 for \$325,000 worth of bonds of the board of levee commissioners for the Yazoo-Mississippi delta district. These bonds bear 4 per cent. interest.

The city of Norfolk will sell \$29,500 of 4 per cent. 30-year bonds, and will receive bids until August 10. Bids should be sent to the office of the city treasurer of Norfolk. J. B. Lowenburg and H. C. Davis are chairmen of the finance committees of the common council.

The tobacco warehouse owners of Louisville, Ky., have formed a company, with \$1,600,000 in capital stock. Of this, \$600,000 will be 8 per cent. preferred, which is to be sold at par, and \$1,000,000 is to be issued to the various members upon the payment of \$250,000 in cash. Warehouses which control from 80 to 85 per cent. of the tobacco business in Louisville are in the combination.

Dividends and Interest.

The Fidelity, Trust & Safety Co., of Louisville, Ky., has declared a quarterly dividend of 2 per cent.

The People's Loan & Homestead Co., of Galveston, Texas, have declared a semi-annual dividend of 4 per cent.

The following coupons, due August 1, will be paid by the Mercantile Trust & Deposit Co. of Baltimore: Druid Mills Co. first 6s, Raleigh Water Co. first 6s, Town of Wytheville 6s, Leaksville Cotton Mills 6s, Monongahela River Railroad 6s.

Financial Notes.

The Iron Belt Building and Loan Association, of Roanoke, Va., has elected H. C. Trout, of Roanoke, president; O. E. Guinn and A. L. Anthony, vice-presidents; A. B. Jacobs, Roanoke, secretary, and J. R. Terry, Roanoke, treasurer.

The semi-annual statement of the Southern Bank of the State of Georgia, at Savannah, for the period ending June 30, 1896, shows a surplus of \$400,000 and undivided profits of \$40,558.78, although the capital stock is but \$500,000. The last semi-annual dividend was 5 per cent., or \$25,000. This is a remarkably good showing, and indicates the conservative manner in which the bank is conducted by its present directors.

A New Foreign Steamship Line at Mobile.

Editor Manufacturers' Record:

The Southern direct-trade movement, which the writer has been agitating for some years, and to which the Manufacturers' Record gave such valuable aid by its wide circulation and powerful influence, has resulted in the establishment of fifteen new lines and a steady and large carriage of American stuff abroad through Southern seaports, and new lines are being constantly started.

The latest new line is one at Mobile, Ala., and in connection therewith a Spanish-American journal has been established, *El Comercial Americano* (The American Commercial), printed in both Spanish and English. The paper is edited by S. J. Bloodworth, and the business management is under T. A. Steele, while it numbers among its writers that bright journalist, Mr. T. C. DeLeon.

The steamship line has been established between Mobile and the Caribbean ports, and is doing a large traffic in bringing bananas and other fruits, and carrying out, loaded to the water line, general merchandise, lumber, coal and machinery. Mobile furnishes cheap coal, fine facilities, and charges no port fees. The competition afforded for transportation has had a beneficial effect in stimulating the fruit-raisers in those countries to extend their plantations. Passengers are using the line, too. The lumber export is steadily growing from this port. The exports include corn, flour, candies, railroad cars, coal, coke, cotton, cotton cloth, clothing, fish, bags, glassware, ammunition, pig iron, car wheels, iron castings, iron manufactures, machinery, saws, cottonseed meal, silk, soap, sugar, leaf tobacco, etc. The increase in the importation of bananas especially is large.

The Southern direct-trade movement is on to the end now, and its proportions cannot be estimated. The carriage of grain, breadstuffs and meat products through the South is but fairly started from the great West, and betokens a revolution in our foreign trade.

The promised special edition of the Manufacturers' Record, devoted to "Kansas City and its relation to the Gulf trade," is a valuable conception. It is the consummation of the beginning that the writer made before the Atlanta Exposition in an effort to awaken in Kansas City an active interest in the development of trade through Southern ports. It brings into close touch your powerful journal, devoted to Southern progress, and the most vital of the Western cities, closely connected with the South.

Great results must come from the matter. I. W. AVERY.

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<p>"Cuba's Struggle for Liberty" is the subject of a fully-illustrated article in Frank Leslie's Popular Monthly for August. It is written by Fidel G. Pierra, one of the leading spirits of the Cuban delegation in New York, and contains portraits of Generals Gomez, Maceo, Marti, Carillo, Sanchez, Garcia, Rodriguez and Palma, and some interesting views. Another feature of this number is an article on the Christian Endeavor Society, by Rev. Francis E. Clark, its president and founder, with many attractive illustrations. The great Lee Series is continued, with the first two papers on General Lee's part in the battle at Gettysburg, by Col. John J. Garnett, Confederate Artillery.</p>	

Receiver's Sale of the Assets of the Atlantic Short Line Railway Company.

Under and by virtue of an interlocutory decree of sale in the cause of the Central National Bank of New York, complainant, and the Atlantic Short Line Railway Company, defendant, rendered on the 25th day of June, 1896, by the Circuit Court of the United States for the Eastern Division of the Southern District of Georgia, and modified by order of July 6, 1896, I will sell as an entirety and in one parcel (save and except the cars hereinafter referred to as under lease and the lease itself), without valuation, appraisal, redemption or extension, the railroad of the Atlantic Short Line Railway Co. within the State of Georgia, including the roadbed, right of way, easements and appurtenances, tracks and rails, including spikes, bars, cross-ties (used in construction or not), switches, sidetracks, viaducts, bridges, and all and singular everything appurtenant to the same and belonging thereto, and the tools and implements of every character and description belonging to said Railway Company, including the land situate near Sofkee and belonging to said Atlantic Short Line Railway Co., and all and singular the rights and franchises of the said Atlantic Short Line Railway Co. for the operation of a railroad in the State of Georgia, under the laws thereof, at public auction to the highest bidder, before the door of the County Court House of Emmanuel County, at Swainsboro, in the State of Georgia, on the FOURTEENTH DAY OF AUGUST, 1896, between the hours of 10 A. M. and 2 P. M.

I will expose all of the aforesaid property and assets of the defendant company above described for sale at public outcry as aforesaid upon the following terms: No bid to be received for less than the minimum amount of two hundred and ten thousand (\$210,000) dollars in cash; the highest bidder under said terms being required to deposit with me as Receiver a certified bank check on some good and solvent bank for the sum of ten thousand (\$10,000) dollars, or the same amount in cash. Any person depositing said sum of ten thousand (\$10,000) dollars shall have the deposit or check returned to him by the Receiver without deduction in the event the bid accepted by the Receiver is not confirmed by the Court, unless the property is resold at the expense of the bidder, and because of his fault in failing to comply with the terms of his bid. The balance of the purchase price bid by the purchaser shall be paid within ten days after confirmation of the sale by the Court, provided that the purchaser, if he controls any of the bona fide liens and debts of the Atlantic Short Line Railway Co. which are entitled to participate in the proceeds of the sale aforesaid, shall have the privilege of turning in said liens and debts at their pro rata values as part payment of the said balance of said purchase money to the extent of said pro rata values. The said purchaser shall take said property subject to the payment of all taxes on the same for the year 1896.

Immediately after the sale of the foregoing, I, as said Receiver, will expose for sale and knock off to the highest bidder the box and flat cars belonging to said Atlantic Short Line Railway Co., and now in the possession of the Georgia & Alabama Railway, consisting of twenty-three box cars and forty-seven flat cars, subject to the terms of said lease, which permits the said Georgia & Alabama Railway to retain possession of said cars until it shall have been reimbursed for outlays in repairing said cars; and also the lease itself between myself as Receiver and said Georgia & Alabama Railway.

By the terms of said decree, it is ordered that the Receiver shall make a report of said sale and his actings and doings in the premises, and file the same in said Circuit Court within five days after said sale. That within five days after the filing of said report, or as soon thereafter as practicable, the matter of the confirmation of said sale shall be heard and determined, and the Court shall thereupon, after giving the parties to the record in said case an opportunity to be heard, determine in its discretion whether it shall confirm the said sales.

It is in said decree ordered that should

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the Court, on or before the day of sales, as hereinbefore directed, postpone or adjourn the same to some other and later date than that now fixed, that the Receiver, at the time and place for said sale now provided, shall make public announcement of the fact of said adjournment, and said adjourned sale shall be advertised as the Court shall hereafter direct.

By the terms of said decree it was further ordered, that should the sales hereinbefore first ordered to be made and said adjourned sales, or either of them, fail to be made after due advertisements, as hereinbefore provided, and after effort made by the Receiver to make said sale in accordance with this decree, or said sales, having been made, should fail to receive the confirmation of the Court, then in that case the Court shall have power to direct a re-exposure for sale of said property and assets, upon such terms and advertisement and at such times as may to it seem best.

JOHN R. YOUNG, Receiver.

Savannah, Ga.

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JOHN K. COWEN, Counsel.

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Ads. marked thus † appear in first issue of each month.
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PROPOSALS.

PROPOSALS FOR THE CONSTRUCTION OF THREE THIRTY KNOT TORPEDO BOATS AND OTHER TORPEDO BOATS FOR THE UNITED STATES NAVY.—Navy Department, Washington, D. C., June 18, 1896.—Under authority conferred by the act of Congress making appropriations for the naval service, approved June 10, 1896, sealed proposals are hereby invited and will be received at this Department until 12 o'clock noon on Friday, the 27th day of September, 1896, at which time and place they will be opened in the presence of attending bidders, for the construction, by contract, exclusive of sea-stores, and of the ordnance and outfit of all kinds which, however, will be fitted and secured in place by the contractors, of three thirty knot torpedo boats and other torpedo boats, which vessels are for the purpose of this advertisement, designated as Torpedo Boats Nos. 9, 10 and 11. Three torpedo boats to have a maximum speed of not less than thirty knots an hour, and Torpedo Boats Nos. 12 to 21. Ten, or fewer, torpedo boats of two types, those of type 1 to have a speed of not less than twenty knots an hour, and those of type 2 to have a speed of not less than twenty two and one half knots an hour. The contracts will provide that all the expenses of all trials prior to preliminary or conditional acceptance shall be borne by the contractors. The thirty knot boats and the twenty two and one half knot boats are to be constructed in accordance with the bidders' plans and specifications, but the general plan of a vessel of the latter kind may be examined at the Bureau of Construction and Repair, and plans of the machinery of such a vessel may be had on application to the Bureau of Steam Engineering; the twenty knot boats will be built in accordance with those prepared by the Department, as the Secretary of the Navy may deem most advantageous, all subject to the conditions stated in the "Circular defining the chief characteristics of three thirty knot torpedo boats and other torpedo boats for the U. S. Navy," approved by the Secretary of the Navy on the 17th day of June, 1896. Copies of this circular can be obtained on application to the Bureau of Construction and Repair. Plans and specifications for the construction of the vessels of Type No. 1 of the smaller boats (twenty knots) may be seen and examined at the Navy Department. Forms of proposals embracing a general statement of provisions to be included in the contracts for the vessels will be prepared, and may be obtained at any time after August 1, 1896, on application to the Navy Department, where all information essential to bidders can also be obtained. Said vessels must be completed, the thirty knot boats, within eighteen months, and the others within one year from date of contract, and payments under the contracts will be made on the former mentioned vessels in ten and on the latter in five equal instalments, as the work progresses, upon bills duly certified, from which ten per cent. will be reserved to be paid on the full and final completion of the respective contracts. It is intended to construct three or more vessels of Type 1, those having a speed of twenty knots, and one or more of Type 2, those having a speed of twenty-two and one-half knots. Bidders are invited to name the price at which they will build one, two or three boats, in order that contract may, if necessary, be awarded to one bidder for one, two or three such vessels. Every successful bidder will be required to show to the satisfaction of the Secretary of the Navy, that within three months from date of contract he will be possessed of the necessary plant for the performance, in the United States, of the work which he shall offer to undertake. The evidence thus required must accompany the proposals or be submitted to the Department in advance. Each proposal must be accompanied by a satisfactory certified check, payable to the order of the Secretary of the Navy, and the checks of successful bidders shall become the property of the United States in case they shall fail to enter into the requisite contracts and to furnish the requisite security on the acceptance of their proposals. The amount of such check must be at least five per cent. of the amount of the bid, but bidders including more than one vessel in their proposals will not be required to submit therewith a certified check exceeding in amount the sum of \$20,000. All checks of bidders whose proposals shall not be accepted, will, on the award of the contracts, be returned to them; the check of each successful bidder will be returned to him when his contract has been duly entered into and the requisite security furnished. Contracts will be made separately for each vessel and every bidder whose proposal shall be accepted will be required to enter into a formal contract by October 8, 1896, for the faithful performance of the work, and to give satisfactory bond for such performance in a penal sum equal to fifteen per cent. of the amount of his bid. Proposals must be made in duplicate in accordance with forms which will be furnished on application to the Department, enclosed in sealed envelopes, addressed to the Secretary of the Navy, Navy Department, Washington, D. C., and marked "Proposals for the construction of Torpedo Boats." The Secretary of the Navy reserves the right to reject any or all bids as, in his judgment, the interests of the Government may require. H. A. HERBERT, Secretary of the Navy.

PROPOSALS FOR THE CONSTRUCTION OF THREE BATTLE-SHIPS FOR THE U. S. NAVY.—Navy Department, Washington, D. C., June 25, 1896.—Under authority conferred by the act of Congress making appropriations for the naval service, approved June 10th, 1896, sealed proposals are hereby invited and will be received at this Department until 12 o'clock

noon, on Monday, the 14th day of September, 1896, at which time and place they will be opened in the presence of attending bidders, for the construction, by contract, for the United States Navy, of three vessels, exclusive of armament, which vessels are, for the purposes of this advertisement, designated as Battle ships Nos. 7, 8 and 9. Three sea-going coast-line battleships of about 11,000 tons displacement each. All armor, armor bolts, and their accessories, required for use in the construction of said vessels, excepting such as may be required for the protective decks, are to be furnished by the Government, but the contractor is to furnish all rivets and other fastenings, and drill, tap and fit all holes for rivets and other fastenings used to connect any part of the hull framing to the armor for constructive purposes, and fit, fix, place, and secure to the vessels, in accordance with the plans and specifications, all of the armor, including that used in the construction of the turrets, barbettes, conning towers, and ammunition tubes, and protection for the guns and loading positions. The contracts will provide that all the expenses of all trials prior to preliminary or conditional acceptance shall be borne by the contractor. Said vessels are to be constructed in accordance with plans and specifications provided or adopted by the Secretary of the Navy. A circular defining the chief characteristics of said vessels and their machinery, and enumerating the requirements with which the plans and specifications therefor provided by bidders should comply has been prepared, and copies of the same may be obtained upon application to the Bureau of Construction and Repair. Plans and specifications for the construction of said vessels may be seen and examined at the Department on and after August 1, 1896, and forms of proposals embracing a general statement of provisions to be included in contract for each vessel will be prepared, and may be obtained at any time after said date, on application to the Department, where all information essential to bidders can also be obtained. Said vessels must be completed within three years from the dates of the respective contracts, and payments on each vessel will be made in thirty equal instalments as the work progresses, upon bills duly certified, from which ten per cent. will be reserved to be paid on the full and final completion of the respective contracts. Proposals for the construction of said vessels will be received "from every American ship-builder and other person who shall show, to the satisfaction of the Secretary of the Navy, that within three months from the date of the contract he will be possessed of the necessary plant for the performance of the work in the United States which he shall offer to undertake." The evidence thus required must accompany the proposals or be submitted to the Department in advance. Each proposal must include the construction of both the vessel and her machinery, complete in all respects, as required by the plans and specifications, and contract will be made separately for each vessel, including hull and machinery. Bidders who may desire to offer to construct two of said vessels may embrace both in one proposal, the price of each being given separately, and may propose separately for one or two vessels under one or both of the two classes of proposals as specified in the aforesaid circular. Each proposal must be accompanied by a satisfactory certified check payable to the order of the Secretary of the Navy, and the checks of successful bidders shall become the property of the United States in case they shall fail to enter into the requisite contract and to furnish the requisite security on the acceptance of their proposals. The amount of such check must be at least \$50,000 with a proposal for one vessel, or \$100,000 with a proposal for two vessels. All checks of bidders whose proposals shall not be accepted will, on the award of the contracts, be returned to them; the check of each successful bidder will be returned to him when his contract has been duly entered into and the requisite security furnished. Every successful bidder will be required to enter into a formal contract by October 8, 1896, for the faithful performance of the work, and to give a satisfactory bond for such performance in a penal sum equal to fifteen per cent. of the amount of his bid. Proposals must be made, in duplicate, in accordance with forms which will be furnished on application to the Department, enclosed in sealed envelopes, addressed to the Secretary of the Navy, Navy Department, Washington, D. C., and marked "Proposals for the construction of Battle-ships." The Secretary of the Navy reserves the right to reject any or all bids, as, in his judgment, the interests of the Government may require. H. A. HERBERT, Secretary of the Navy.

TREASURY DEPARTMENT, Office Supervising Architect, Washington, D. C., July 28, 1896.—Sealed proposals will be received at this office until 2 o'clock P. M. on the 28th day of August, 1896, and opened immediately thereafter, for all the labor and materials required for the erection and completion (except heating apparatus) of the U. S. Postoffice building at Beaver Falls, Pa., in accordance with the drawings and specification, copies of which may be had at this office or at the office of the Superintendent of Construction at Beaver Falls, Pa. Each bid must be accompanied by a certified check for a sum not less than 2 per cent. of the amount of the proposal. The right is reserved to reject any and all bids and to waive any defect or informality in any bid if it be deemed in the interest of the Government to do so. All proposals received after the time stated will be returned to the bidders, sealed and marked, "Proposal for Erection and Completion (except heating apparatus) of the U. S. Postoffice, Beaver Falls, Pa., and addressed to WM. MARTIN AIKEN, Supervising Architect.



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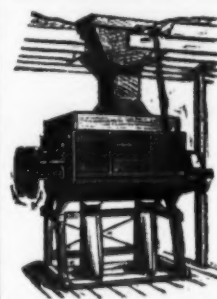
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TREASURY DEPARTMENT, Office Supervising Architect, Washington, D. C., July 30, 1896.—Sealed proposals will be received at this office until 2 o'clock P. M. on the 27th day of August, 1896, and opened immediately thereafter, for all the labor and materials required for the interior finish, plumbing and gas piping for the U. S. Postoffice building at Taunton, Mass., in accordance with the drawings and specification, copies of which may be had at this office or at the office of the Superintendent at Taunton, Mass. Each bid must be accompanied by a certified check for a sum not less than 2 per cent. of the amount of the proposal. The right is reserved to reject any and all bids or to waive any defect or informality in any bid should it be deemed in the interest of the Government to do so. All proposals received after the time stated will be returned to the bidders. Proposals must be enclosed in envelopes, sealed and marked, "Proposal for Interior Finish, etc., for the U. S. Postoffice, Taunton, Mass.," and addressed to WM. MARTIN AIKEN, Supervising Architect.



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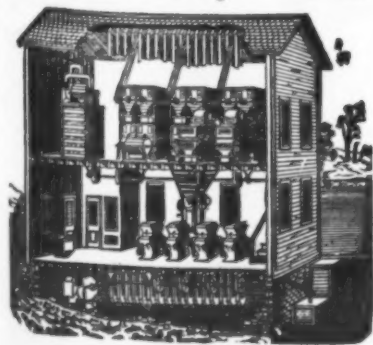
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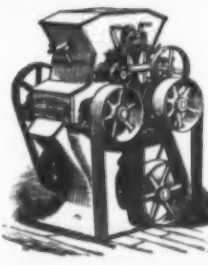
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By virtue of the decree and pursuant to the orders of the Superior Court of Gaston County, in the case of Ballard & Wiley, Trustees of B. L. Duke vs. the Bessemer Mining Company and others, the undersigned, receivers and commissioners, appointed by said court, will, on Tuesday, the 8th day of September, 1896, at 10 o'clock A. M., at the office of the Bessemer Mining Company, in Bessemer City, N. C., sell at public auction to the highest bidder, on the terms hereinafter named, the entire property, real and personal and mixed, and assets of every kind and description, belonging to the Bessemer Mining Company, corporation, consisting of about seventeen (1700) hundred acres of land in and near the town of Bessemer City, N. C., lying on both sides of the Charlotte & Atlanta Division of the Southern Railway, and constituting the valuable mining plant of said Bessemer Mining Company, machinery, tools and appliances, office furniture and fixtures, ores on hand, etc., to be sold in a body as a whole. A full, complete and more particular description of said lands and mineral and timber rights, easements and privileges, may be found on reference to the several deeds to said Bessemer Mining Company for the same, which are in the possession of the undersigned, and are duly registered in the office of the Register of Deeds for the county of Gaston, in the State of North Carolina, obtained by said Bessemer Mining Company from the following named corporations and individuals, to-wit: From the Bessemer City Mining & Manufacturing Company; from the Consolidated Manufacturing Company; from the Fidelity Bank of Durham, N. C., trustee; from J. A. Smith and wife; J. A. Pinchback; R. D. Ormand and wife; Benjamin Ormand and wife; Jacob Ormand and others.

At the same time and place the undersigned will offer for sale at public auction as aforesaid a very large number of city lots belonging to said Bessemer Mining Company, located in said town of Bessemer City, N. C., and suitable for building lots, for residence and business purposes, laid down upon W. R. Richardson's survey and map of Bessemer City, N. C., which will be designated and pointed out to purchasers on the day of sale. Also the "Fire Clay" tract of land in Cleveland county, referred to and conveyed to said Bessemer Mining Company by said Bessemer City Mining and Manufacturing Company by the deed registered in book No. 20 (deeds), page 523, in the office of the register of deeds of Gaston county, and also described in the deed to said J. A. Smith from R. N. Patterson and others, dated March 24, 1891, registered in the office of the register of deeds for Cleveland county in book No. "B. B." of deeds, page 223.

TERMS OF SALE.

One-third of the purchase money to be paid in cash on the day of sale, and the balance of the purchase money to be paid within twelve (12) months from and after the day of sale, with interest from the day of sale on the deferred payment. Possession to be given the purchasers on receipt by the undersigned of the one-third cash payment on the purchase money, and the purchaser to be thereafter responsible for, and liable to pay all taxes assessed against the property purchased by him, and title deeds withheld as security for the deferred payment. It will be optional with purchasers to anticipate and pay the deferred payments of the balance of the purchase money at any time after the day of sale, and within the twelve months aforesaid, and thereby stop the accruing of interest on the deferred payment.

Any further information desired concerning said property, and the sale thereof, may be obtained on application to the undersigned.

Dated July 3d, 1896.

J. S. CARR,
of Durham, N. C.

E. T. CARRINGTON,
of Bay City, Michigan,
Receivers and Commissioners.

FOR SALE.

Works of the Phosphate Mining Co., Limited

Under order of the
United States Circuit Court for the District of
South Carolina.

The valuable piece of property, being the works of the Phosphate Mining Co., Limited, generally called Brotherhood's, situated about 1½ miles from Port Royal, S. C. Consisting of about 24 acres, more or less. Having a river frontage on Battery Creek of 971 feet, with fine wharves, etc. Convenient for loading ocean steamers (have from this point carried down steamers loaded to 21 ft. 6 in.) The Port Royal & Augusta Railroad passes through the property and has suitable switch conveniently located.

On property is fine large open shed some 240 feet by 70 feet, brick piers, with three railroad tracks overhead. Other desirable warehouse buildings, with overhead railroad trestles from wharves, boiler-house, etc. Desirable dwelling-houses and outhouses. Fine artesian well and large brick cisterns.

A most desirable site for Cotton Mill, Manufacturing, Warehouse purposes, Ocean shipments.

For particulars apply to

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To Dredging Contractors.

For sale under order of United States Circuit Court for South Carolina.

The powerful elevator dredge John Kennedy, recently in use dredging South Carolina river phosphate rock.

Can be readily converted for ordinary dredging purposes, working in from 10 feet to 42 feet of water.

Especially constructed for dredging very hard material. Can be seen at Phosphate Mining Co., Limited, works near Port Royal, S. C.

For particulars, etc., apply to

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53 Hayne Street, CHARLESTON, S. C.

FOR SALE.

Under order of the
United States Circuit Court for the District of
South Carolina.

A number of 120-ton LIGHTERS, very strongly built and in good condition.

One Vertical Engine, cylinder 8x8, centre crank, Greenfield make.

One Horizontal Engine, Talbot & Sons' make, cylinder 8x12, centre crank.

Two 40 horse-power Return Tubular Boilers, complete, with independent fronts, smoke stack and fittings.

One 20 horse-power Vertical Boiler, tubular, complete, with stack and fittings (new).

One Head & Sisco Centrifugal Pump, 10-inch discharge, with vertical engine driving direct. (Rice planters' attention called to above.)

A number of Williamson Friction Hoisting Engines.

One Steam Crane to lift three ton; radius of jib 15 feet.

One Steam Travelling Crane to lift ten ton; radius of jib variable up to 20 feet; gauge of track 6 feet; complete, with boiler and water tank.

One Blake Steam Pump, 10x12x12; suction 6 inch, discharge 4 inch.

One Blake Steam Pump, 4½x5½x8; suction 1½ inch, discharge 1 inch.

One Blake Steam Pump, 6x7x12; suction 3½ inch, discharge 2½ inch.

Two Blake Plunger Feed Pumps, 5½x3½x7; suction 2 inch, discharge 1½ inch.

One Artesian Well Pump (Blake), steam cylinder 8 inch by 24-inch stroke; water plunger 1 inch, with 50 feet 4 inch pipe and rods for 6-inch well.

One Screw Cutting Lathe, 12 inch swing, 3 feet 6-inch centres, with chuck, face, plates and fittings.

One Phosphate Rock Tub Washer, complete, with shafting, gears, etc., and duplicates.

A quantity of first-class second-hand Chain, ¾ to 1½ inch.

Two Steel Cylinder Washers for phosphate rock, complete, with rollers and gearing.

Two pair of powerful Crusher Rolls for phosphate rock, complete, with pulleys and gearing.

Two Direct Acting Steam Elevators, with carriage, etc.; steam cylinder 15 inch by 17 feet 9 inch lift, and steam cylinder 20 inch by 16 feet 9 inch lift.

Pile Driver Frame, 1800-pound hammer and fixings.

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Artesian Well Tools, Tarpaulins, Platform Scales from 200 pounds to 16,000 pounds.

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Steam and Water Hose and valuable Tools, Materials, etc., etc.

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One Engine Lathe, 33 in. x18 ft., L. W. Pond.
One Engine Lathe, 15 in. x6 ft., D. W. Pond.
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One 36 in. Back Geared Drill.
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than in any other way.
BALTIMORE, MD.

SOUTHERN LUMBER DIRECTORY.

A List of Leading Lumber Dealers and Manufacturers in the South.

This list of representative Southern lumber merchants and manufacturers is published for the benefit of those who desire to reach responsible houses in this branch of business in the South. Readers of the MANUFACTURERS' RECORD who have occasion to correspond with any of the firms mentioned below will confer a favor by mentioning this paper.

YELLOW PINE.
Manufacturers.

Villa Rica Lumber Co., Anniston, Ala.
Reddie & Simonson, Birmingham, Ala.
Hawkins & Smith, Birmingham, Ala.
Marbury Lumber Co., Bozeman, Ala.
Marbury & Jones, Bozeman, Ala.
Peters Lumber Co., Brewton, Ala.
W. T. Smith Lumber Co., Chapman, Ala.
LaFayette Cooke, Cook's Springs, Ala.
Dunham Lumber Co., Dunham, Ala.
W. J. Williams & Son, Eustis, Ala.
E. Walker, Flomaton, Ala.
Gadsden Lumber Co., Gadsden, Ala.
Tuscaloosa Lumber Co., Hull, Ala.
J. B. Adams, Longview, Ala.
S. B. Allen & Co., Montgomery, Ala.
Moore & Kirkland, Montgomery, Ala.
Wm. C. Holt, Montgomery, Ala.
Pansy Lumber Co., Pansy, Ala.
T. H. Boxley, Sterrett, Ala.
S. A. Blassingame, Verbena, Ala.
J. G. Jackson & Sons, Wilsonville, Ala.
Martin Lumber Co., Bolinger, Ark.
Long-Bell Lumber Co., Buckner, Ark.
T. M. Turple, Caldwell, Ark.
Cotton Belt Mill, Cotton Belt, Ark.
Ferdye Lumber Co., Ferdye, Ark.
Fort Smith Lumber Co., Fort Smith, Ark.
Red River Lumber Co., Lewisville, Ark.
North Arkansas Lumber Co., Portia, Ark.
Bluff City Lumber Co., Pine Bluff, Ark.
Kansas City & Southern Lum. Co., Sedgewick, Ark.
J. I. Porter Lumber Co., Stuttgart, Ark.
A. J. Neimeyer Lumber Co., Waldo, Ark.
Simpson & Co., Bagdad, Fla.
Carey & Ollinger, Bagdad, Fla.
Sanford Lumber Co., Caryville, Fla.
Skinner & McDavid, Escambia, Fla.
J. P. Little, Sumner, Fla.
Chipola Lumber Co., Marianna, Fla.
Southern States Land & Lum. Co., Muscogee, Fla.
Armstrong & White, Neoga, Fla.
McMillan Mill Co., Pine Barren, Fla.
Georgia & Florida Investment Co., Tallahassee, Fla.
J. J. Hanesley, Americus, Ga.
Perkins Mfg. Co., Augusta, Ga.
Flint River Lumber & Export Co., Bainbridge, Ga.
Brown & Garber, Brunswick, Ga.
Donaldson Lumber Co., Donaldsonville, Ga.
I. W. Garbutt & Co., Garbutt, Ga.
James K. Clark Lumber Co., Gertrude, Ga.
Bewick Lumber Co., Hazelhurst, Ga.
Mincola Lumber Co., Mincola, Ga.
O'Neill Manufacturing Co., Rome, Ga.
Hilton & Dodge Lumber Co., St. Simon's Mills, Ga.
Julius Levin & Co., Alexandria, La.
Bradley-Ramsey Lumber Co., Lake Charles, La.
Gulf Lumber Co., New Orleans, La.
W. W. Carre, New Orleans, La.
McEwen & Murray, Limited, New Orleans, La.
A. Wilbert's Sons Lum. & Shn. Co., Plaquemine, La.
Hearn & Co., Robertsville, La.
Victoria Lumber Co., Victoria, La.
Keystone Lum. & Imp. Co., Bogie Chitto, Miss.
J. S. Blackburn, Ellisville Depot, Miss.
W. L. Rankin & Bro., Fayetteville, N. C.
C. C. Wade & Son, West End, N. C.
Bridges & McKirthan Lumber Co., Wilmington, N. C.
D. W. Alderman, Alcolu, S. C.
E. D. Mins, Edgefield, S. C.
Mallard Lumber Co., Greeleyville, S. C.
Reliance Lumber Co., Beaumont, Texas.
Latcher & Moore Lumber Co., Orange, Texas.
D. R. Wingate Lumber Co., Orange, Texas.
Southern Pine Lumber Co., Texarkana, Texas.
Warren Lumber Co., Warren, Texas.
Wm. Kirk, Parkersburg, Va.
Cairo Mfg. & Lumber Co., Petroleum, W. Va.

NORTH CAROLINA PINE.
Manufacturers.

Samuel Eccles, Jr., Baltimore, Md.
Geo. F. Sloan & Bro., Baltimore, Md.
Ryland & Brooks Lumber Co., Baltimore, Md.
R. T. Waters & Son, Baltimore, Md.
Aberdeen Lumber Co., Aberdeen, N. C.
Page Lumber Co., Aberdeen, N. C.
C. W. Mobley & Co., Berry, N. C.
Gay Manufacturing Co., Bosley, N. C.
Albemarle Lumber Co., Elizabeth, N. C.
W. L. Rankin & Bro., Fayetteville, N. C.
Frank Hitch, Hamilton, N. C.
Batters Lumber Co., Hub, N. C.
Nassamond Lumber Co., Montrose Landing, N. C.
W. B. Blades & Bro., New Berne, N. C.
Stinson Lumber Co., New Berne, N. C.
John L. Roper Lumber Co., Roper, N. C.
S. R. Fowle & Son, Washington, N. C.

S. R. Fowle & Son, Wilmington, N. C.
Camp Manufacturing Co., Winton, N. C.
W. T. Ferguson, Ferguson's Wharf, Va.
Cooper & Spottswood, Jarratts, Va.
Apex Lumber Co., Lynchburg, Va.
D. S. Jones, Newport News, Va.
Tunis Lumber Co., Norfolk, Va.
George G. Tyler, Norfolk, Va.
Cummer Co., Norfolk, Va.
H. M. Owen, Pungo, Va.
R. G. Dennis Lumber Co., Suffolk, Va.
Mitchell & Steele, Steelville, Va.
George E. Burt, Waverly, Va.

WHITE PINE.
Manufacturers.

J. R. Beatty & Co., Quilniment, W. Va.
Cumberland Lumber Co., Ronceverte, W. Va.
A. E. Huddleston, White Sulphur Springs, W. Va.
Caldwell Land & Lumber Co., Philadelphia, Pa.

CYPRESS.

Manufacturers.

Mohr-Well Lumber Co., Montgomery, Ala.
Cypress Lumber Co., Sherrill, Ark.
Tallapoosa Lumber Co., Sistrunk, Ala.
T. M. McMillan, Stockton, Ala.
J. P. Little, Sumner, Fla.
Cypress Lumber Co., Apalachicola, Fla.
Wilson Cypress Co., Palatka, Fla.
Hillsborough Cypress Co., Harney, Fla.
St. Mark's Lumber Co., Tallahassee, Fla.
Atlanta Cypress Lumber Co., Atlanta, Ga.
Bibb Land & Lumber Co., Cox, Ga.
N. B. Trelue & Co., Patterson, La.
Julius Levin, Alexandria, La.
Burton Lumber Co., Berwick, La.
Louisiana Cypress Lumber Co., Harvey, La.
Lutcher & Moore Cypress Lum. Co., Lutcher, La.
Iberia Lumber Co., New Iberia, La.
McEwen & Murray, Limited, New Orleans, La.
Callahan & Lewis Mfg. Co., Patterson, La.
J. H. Leavenworth, Greenville, Miss.
E. G. Goddard Lumber Co., Logtown, Miss.
R. F. Learned, Natchez, Miss.
Wm. Curphey, Vicksburg, Miss.
W. H. Richardson, Eagle Rock, N. C.
W. D. Hickman, Granite, N. C.
W. B. Ellis, New Berne, N. C.
Hilton & Dodge Lumber Co., St. Simon's Mills, Ga.
Hansen & Smith, Wilmington, N. C.

CYPRESS SHINGLES.

Manufacturers.

John S. Mash & Sons, Luverne, Ala.
Mobile Shingle & Manufacturing Co., Mobile, Ala.
J. D. Cameron & Son, Mobile, Ala.
Stewart & Butt, Mobile, Ala.
Wm. C. Holt, Montgomery, Ala.
The Cypress Lumber Co., Apalachicola, Fla.
Highland Land & Lumber Co., Humphrey, Ark.
Niemeyer & Darragh Shingle Co., Little Rock, Ark.
Carrey & Ollinger, Bagdad, Fla.
Bohemia Shingle Mill Co., Bohemia, Fla.
Wm. A. McCann, Jacksonville, Fla.
Cherokee Lumber Co., Atlanta, Ga.
T. E. Collier, Cordele, Ga.
J. L. Maxwell, Cornelia, Ga.
J. S. Owens, Hawkinsville, Ga.
H. H. Tift, Tifton, Ga.
Julius Levin & Co., Alexandria, La.
B. T. Durham, Leno, La.
Lutcher & Moore Cypress Lumber Co., Lutcher, La.
McEwen & Murray, Limited, New Orleans, La.
Sult & Co., Ahoaki, N. C.
John L. Roper Lumber Co., Norfolk, Va.
L. Miller Shingle Co., Orange, Texas.
Hilton & Dodge Lumber Co., St. Simon's Mills, Ga.
Moore & Swineford, Orange, Texas.

HARDWOOD.

Manufacturers.

Scatcherd Lumber Co., Decatur, Ala.
H. C. Higman & Co., Decatur, Ala.
G. W. Tarwater, Gadsden, Ala.
Sample Lumber Co., Hollins, Ala.
W. O. Knowlton, Paint Rock, Ala.
Lathrop-Hatton Lumber Co., Riverside, Ala.
J. N. Hutchinson, Salem, Ala.
Guthrie Bros., Sulligent, Ala.
Sullivan Timber Co., Wilson, Ala.
Desha Lum. & Planting Co., Arkansas City, Ark.
G. W. Decker, Black Rock, Ark.
Fairst & Co., Bryant, Ark.
Southern Land & Lumber Co., Dry Run, Ark.
J. M. Brittan, England, Ark.
Dickson, Cross & Co., Fairmount, Ark.
Geo. H. Munroe, Recliver, St. Francis, Ark.
W. S. Elder, Stonewall, Ark.
S. C. Dewell, Walnut Ridge, Ark.
James Chapin & Son, Cloverport, Ky.
W. L. Pence, Frankfort, Ky.
E. A. Smith, Glendale, Ky.
J. W. Boyd & Co., King's Mountain, Ky.
Maston Lumber Co., Livingston, Ky.
Kentucky Saw Mill Co., Louisville, Ky.
A. H. Rennebaum, Middleborough, Ky.
J. B. Doney & Co., Amory, Miss.
Ashley & Clement, Hernando, Miss.
B. Crisler, Meridian, Miss.
C. W. Rich, Richburg, Miss.
J. E. P. Boxley, Robinsonville, Miss.
John B. Wheeler & Co., Cooter, Mo.
Hannibal Saw Mill Co., Hannibal, Mo.
Hunter & Dawson, La Grange, Mo.
The Dickson-Mason Lumber Co., Asheville, N. C.

D. C. Way Lumber Co., Haslin, N. C.
J. R. Fowle & Son, Washington, N. C.
Wm. H. Cole, Waynesville, N. C.
Cumberland Manufacturing Co., Harriman, Tenn.
Moore & McFarren, Memphis, Tenn.
Nashville Lumber Co., Nashville, Tenn.
N. L. Johnson, Pennington Gap, Va.
Mitchell & Steele, Steelville, Va.
Condon-Lane Boom & Lumber Co., Brets, W. Va.
James Lumber Co., Charleston, W. Va.
H. S. White, Matewan, W. Va.
J. U. Graham, New Richmond, W. Va.
John W. Graham, Central City, W. Va.
Nicola Bros., Nicolette, W. Va.
J. C. Williamson, Williamson, W. Va.
Beaver Creek Lumber Co., Philadelphia, Pa.
Caldwell Land & Lumber Co., Philadelphia, Pa.

Wholesale HARDWOOD Dealers.

W. H. Treworgy, Boston, Mass.
Smith & Blanchard, Boston, Mass.
James A. Wood, Boston, Mass.
Parker & Page, Boston, Mass.
Weston & Bigelow, Boston, Mass.
Palmer, Parker & Co., Boston, Mass.
Litchfield Bros., Boston, Mass.
E. J. Hammond & Co., Boston, Mass.
W. S. Daniel, Boston, Mass.
John M. Woods & Co., Boston, Mass.
Howard Watson, St. Louis, Mo.
Berthold & Jennings, St. Louis, Mo.
Boyd & Wyman Lumber Co., St. Louis, Mo.
Smith & Little, St. Louis, Mo.
Chas. F. Luehrmann Hardwood Lumber Co., St. Louis, Mo.
Bohn-Verdin Lumber Co., St. Louis, Mo.
Druhe Hardwood Lumber Co., St. Louis, Mo.
Smith & Meier Lumber Co., St. Louis, Mo.
Abeles & Tansig, St. Louis, Mo.
Steele & Hibbard, St. Louis, Mo.
James A. Harnett & Co., St. Louis, Mo.
Wyeth Lumber Co., St. Louis, Mo.
Nat S. Rogers & Co., Asheville, N. C.

HARDWOOD.

Wholesale Dealers and Exporters.

Price & Heald, Baltimore, Md.
Price & Co., Baltimore, Md.
Samuel Eccles, Jr., Baltimore, Md.
E. M. Lazarus & Co., Baltimore, Md.
W. W. Welch, Baltimore, Md.
Wm. S. Cross, Baltimore, Md.
J. van Hall, Baltimore, Md.
A. I. Lyon, Baltimore, Md.

STAVES AND HEADING.

Manufacturers.

Stave & Hoop Co., Alexander City, Ala.
Decatur Stave Works, Decatur, Ala.
J. B. Adams, Longview, Ala.
H. C. Stiles & Co., Stiles, Ala.
P. V. De Land, Black Rock, Ark.
Beck & Ellis Bros., Cherry Valley, Ark.
Danforth & McLin, Greenway, Ark.
Springfield Lum. & Cooper's Co., Jonesboro, Ark.
Stetcher Cooperage Works, Jonesboro, Ark.
Jonesboro Stave Co., Jonesboro, Ark.
J. H. Hamlen & Son, Little Rock, Ark.
Little Rock Cooperage Co., Little Rock
Wilson Bros., Piggott, Ark.
Tampa Lumber Co., Tampa, Fla.
J. N. Bray, Cecil, Ga.
Kentucky Union Lumber Co., Clay City, Ky.
Dewey Stave Co., New Orleans, La.
George D. Elke, New Orleans, La.

Pioneer Steam Keg Works Co., Brownwood, Mo.
J. H. Bridges & Co., Campbell, Mo.
W. H. Miller Stave Works, De Witt, Mo.
Hall & Frisbee, Dexter, Mo.
F. G. Oxley Stave Co., Poplar Bluff, Mo.
Wm. H. Cole, Waynesville, N. C.
Palmer Mfg. Co., Wilmington, N. C.
Smith & Wood, Dyersburg, Tenn.
Frank Stave & Lumber Co., Frank, Tenn.
Hudson, Ward & Ray, Greenfield, Tenn.
Sherwood Stave Co., Lawrenceburg, Tenn.
McLean & Smith, Martin, Tenn.
Beck & Elias Bros., Memphis, Tenn.
Sharer & Hall, Oneida, Tenn.
J. F. Howard, Union City, Tenn.
Valley Lumber & Stave Co., Richmond, Va.
W. S. Lewis, Carles, W. Va.
Gauley River Lumber Co., Gauley River, W. Va.
H. Gwinn, Green Sulphur Springs, W. Va.
Waybright & Helesman, Kendall, W. Va.
Schaffer, Brown & Co., Kingwood, W. Va.
E. O. Felton, Ronceverte, W. Va.

PINS, BRACKETS AND CROSSARMS.
Central Manufacturing Co., Chattanooga, Tenn.

RAILROAD TIES.

W. M. Molton, Saltpa, Ala.
R. T. Coles & Sons, Cushing, Ala.
Sperry & Shortwell, Sedgewick, Ark.
Garrett Lumber Co., Texarkana, Ark.
G. A. & W. N. Lougue, New Orleans, La.
James S. Pope, Baltimore, Md.
A. B. Hubbard, Chatawa, Miss.
J. M. Allen, Springfield, Miss.
J. W. Woodward, Waynesboro, Miss.
J. P. & W. C. Weatherbee, Westville, Miss.
Ellis Paul, Cedar Gap, Mo.
F. M. Woodsmall, Gorin, Mo.
Blackburn, Cox & Co., Hannawell, Mo.
Reliance Lumber Co., Beaumont, Texas.
James G. Harrison, Disputanta, Va.
The Conquest Tie & Lumber Co., Norfolk, Va.
R. V. Dorsey, Hurricane, W. Va.
A. C. Tidd, Murfreesville, W. Va.
J. McKinley & Co., Ravenswood, W. Va.

SPOKES AND HANDLES.

Manufacturers.

Huntsville Spoke & Handle Co., Huntsville
South Calera Mfg. Co., South Calera, Ala.
Frederick Spoke Factory, Frederick, Md.
Hagerstown Spoke & Handle Co., Hagerstown, Md.
G. D. De Jarnette, Mayfield, N. C.
Newton Spoke & Lumber Co., Newton, N. C.
C. J. Dundas, Statesville, N. C.
Yorkville Spoke & Handle Co., Yorkville, S. C.
Johnson Bros. & Taylor, Brownsville, Tenn.
Gallatin Manufacturing Co., Gallatin, Tenn.
Wells & Lesh, Jackson, Tenn.
Southern Spoke & Rim Co., Memphis, Tenn.
Lewis & Babcock Mfg. Co., Nashville, Tenn.
American Handle Co., Ltd., Knoxville, Tenn.
Hardy & Holmes, Christie, Va.
R. T. Slusser, Fincastle, Va.
N. Foulson, Round Hill, Va.

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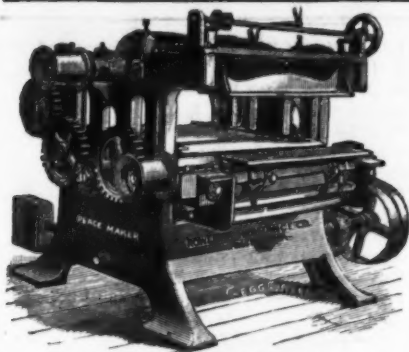
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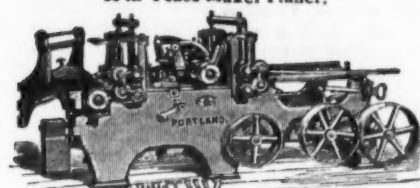
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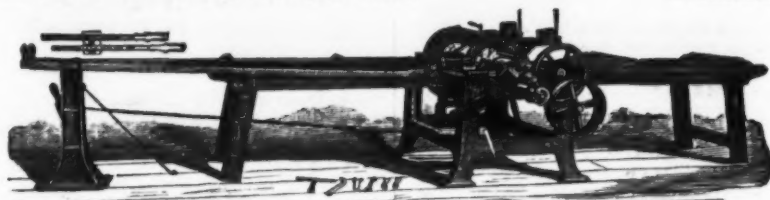
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Write for Illustrated Catalogue and Special Prices.

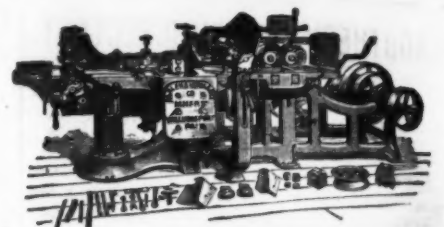
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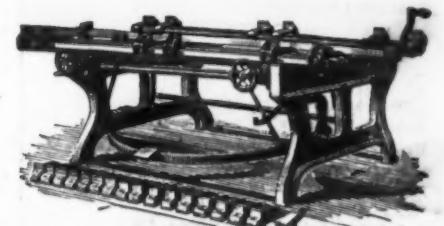
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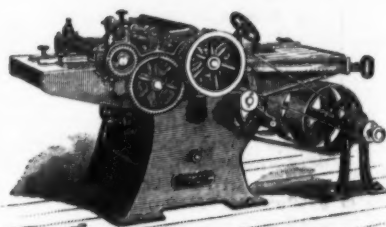
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Iron Column 12 in., 10 in. and 9 in. Four Sided Moulder.



Improved Door Clamp.



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A COMPLETE LINE OF MODERN HIGH-GRADE WOOD-WORKING MACHINERY.

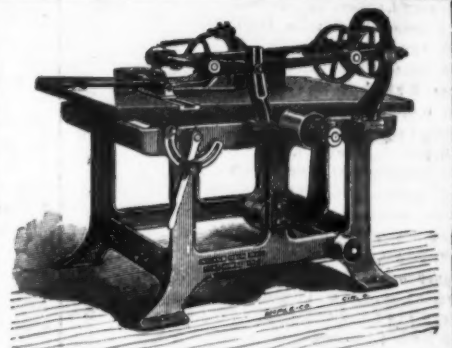
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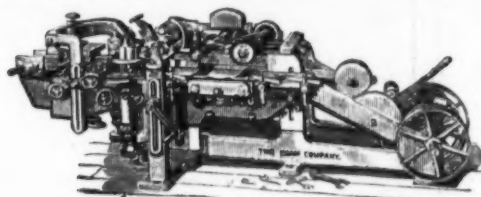
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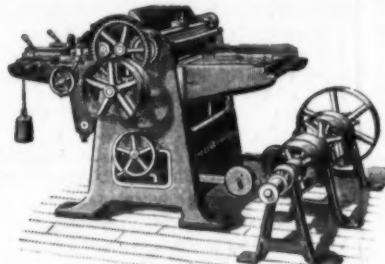


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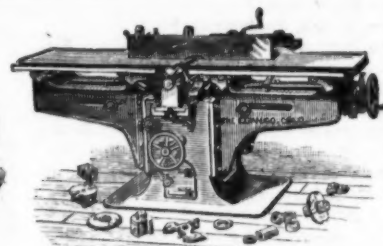
With either wood or iron table. Frame is cast in one piece, and table raises square, always presenting a level surface. (1)



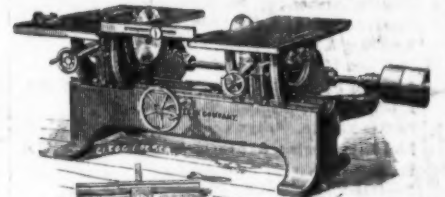
Heavy 12 inch Standard Four Sided Molder.



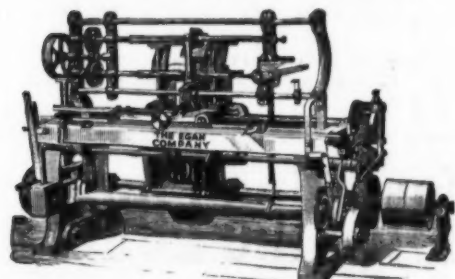
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Improved Automatic Spoke Lathe.
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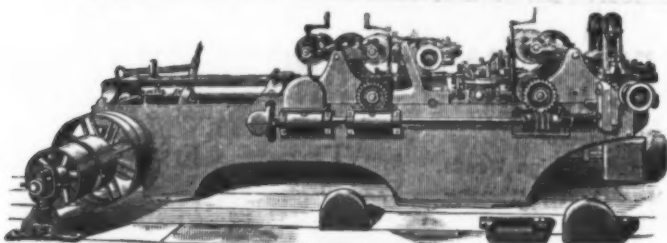
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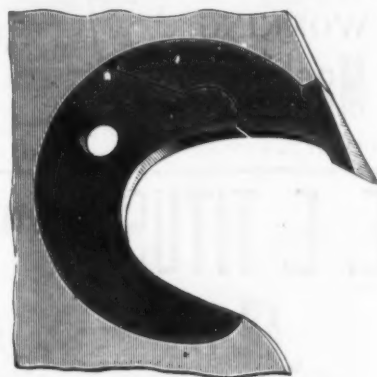
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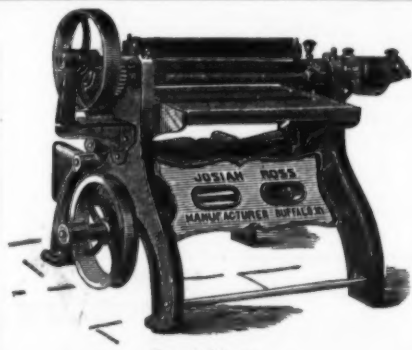


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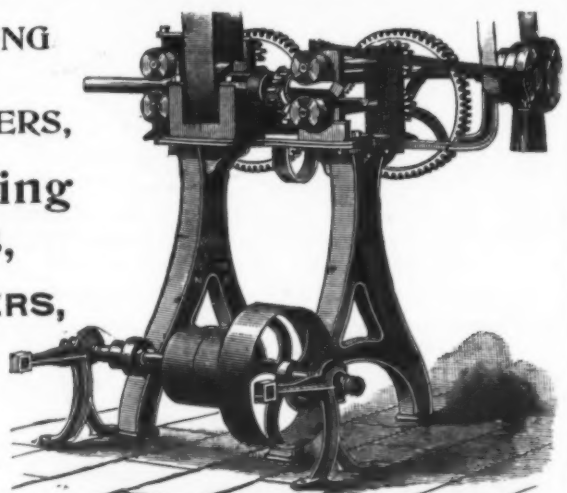
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Veneer Cutting Machines,

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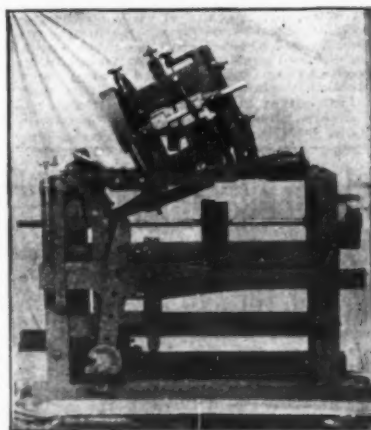


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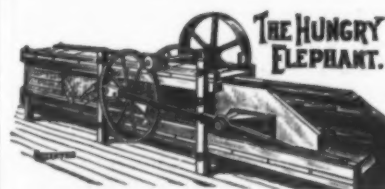
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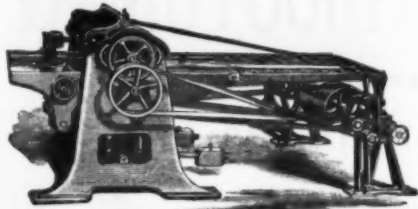
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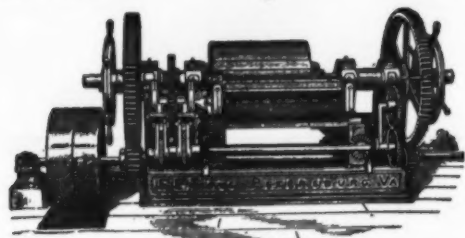
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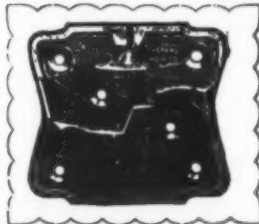
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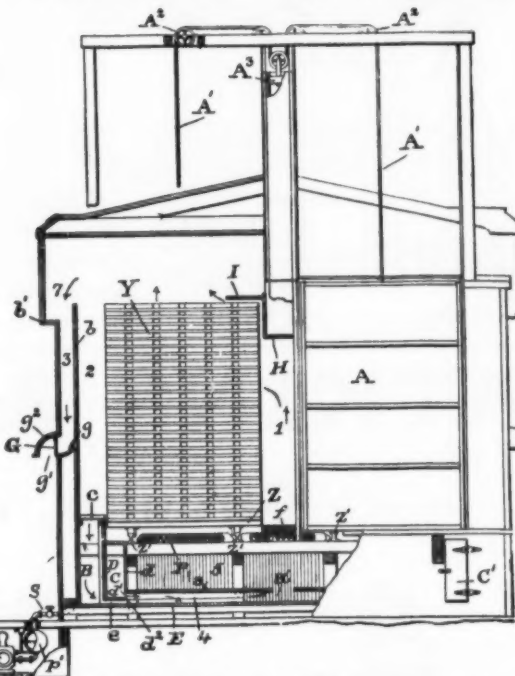
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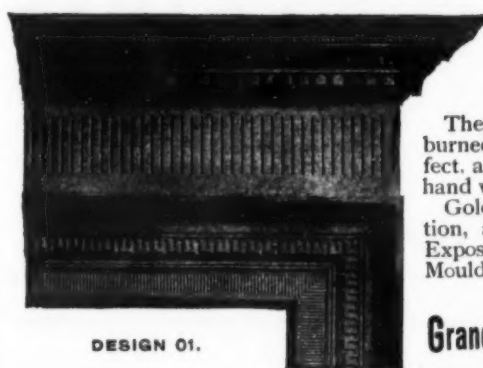
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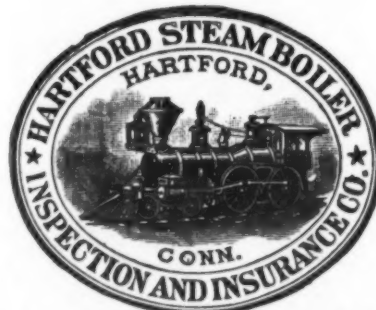
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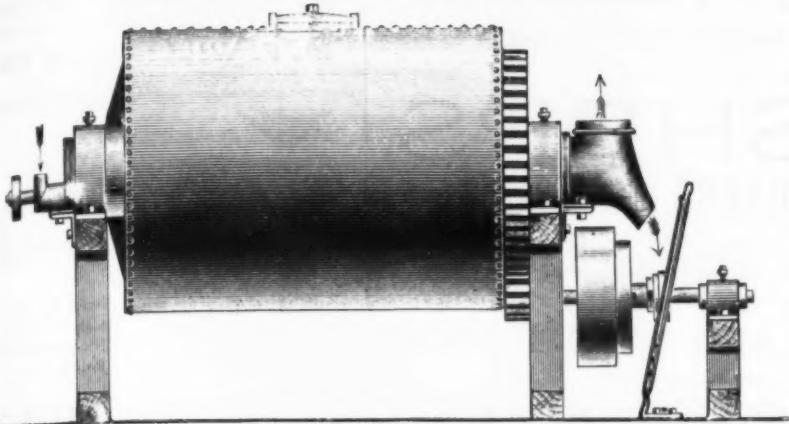
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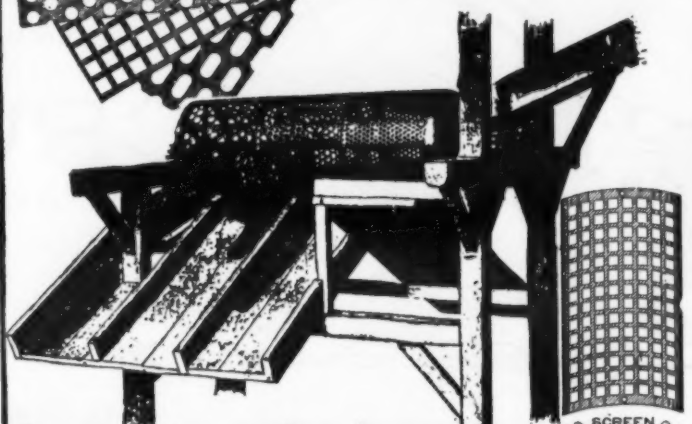
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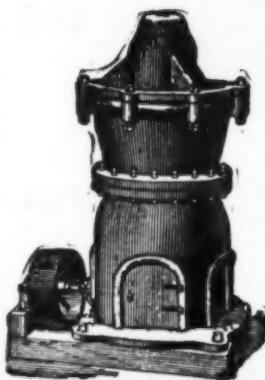
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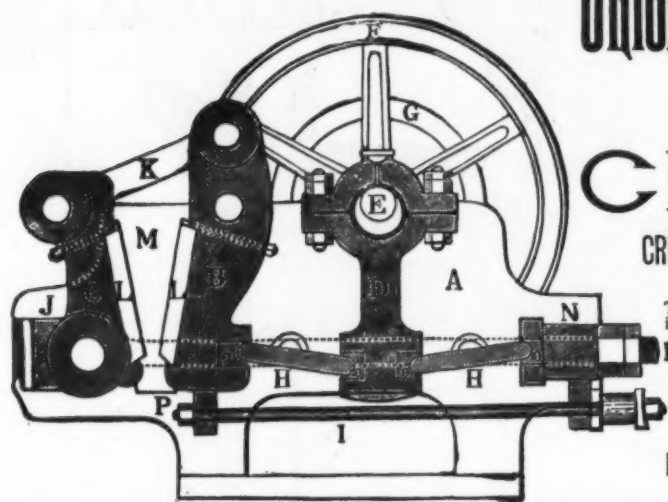
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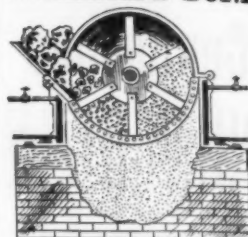
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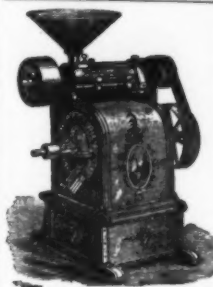
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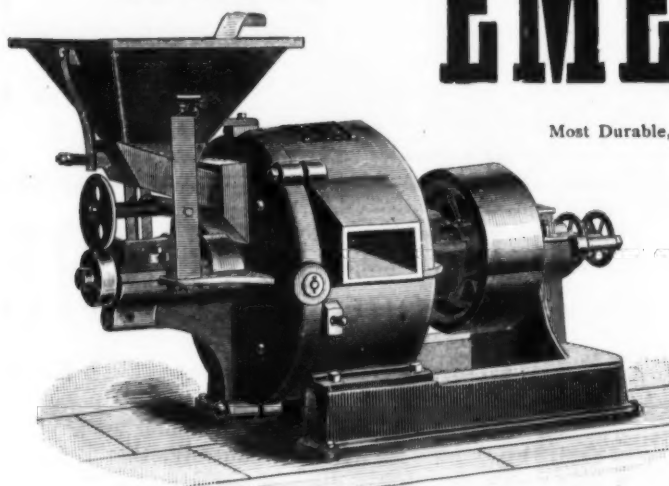
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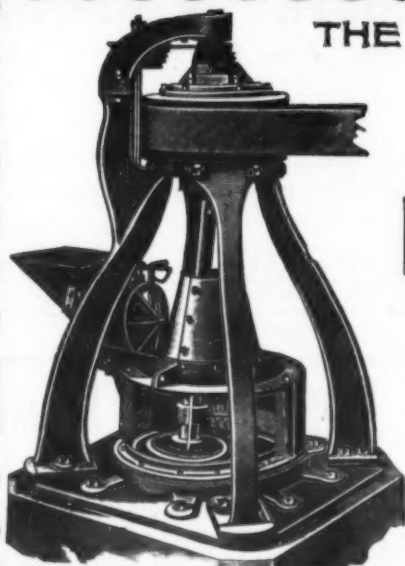
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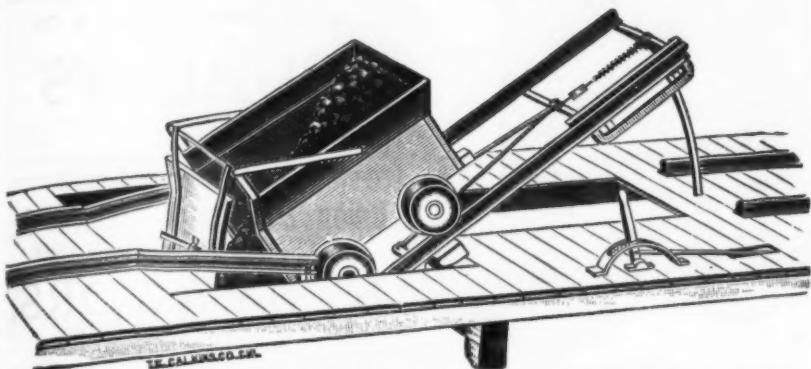
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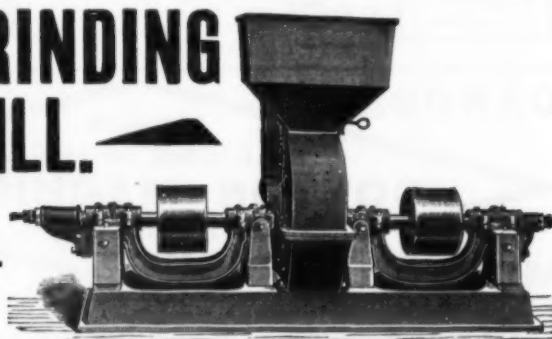
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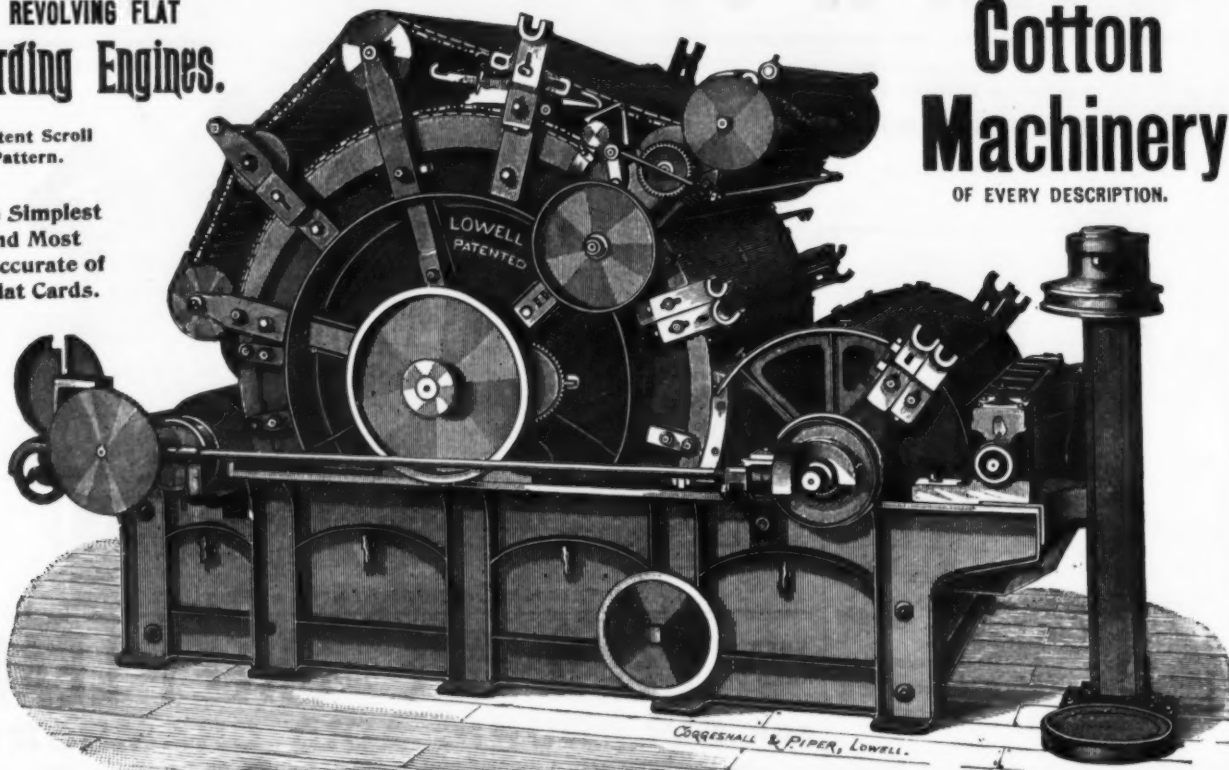
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ORIGINAL FANCY LOOM BUILDERS IN AMERICA
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Rolling Mill Work.
Valves and Cocks for Heavy Pressure.
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Iron, Brass and Steel Castings.

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Our Looms in the South

320 looms running at Tucapau Mill, S. C.

148 more ordered by same mill.

1000 looms being started by Pelzer Mfg. Co., S. C.

600 looms being started by Lockhart Co., S. C.

200 more ordered by same mill.

1040 looms being started by Gaffney Co., S. C.

60 looms sent to Wilmington Mills, N. C.

48 looms ordered by Meridian Mill, Miss.

1280 looms ordered by Spartan Mfg. Co., S. C.

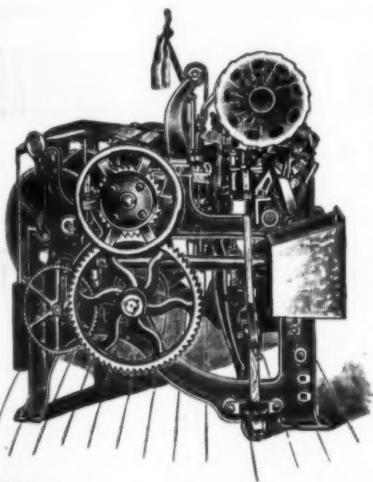
100 looms ordered by Henrietta Mills, N. C.

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250 looms ordered by Victor Mfg. Co., S. C.

5346 in all.

Several thousand Looms also built by other shops to take our attachments.



The Northrop Loom

is no longer an experiment. The above orders prove it. The managers of the above mills are too experienced to risk a failure.

They appreciate a real improvement, however.

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We now recommend this loom and stake our reputation on its success.

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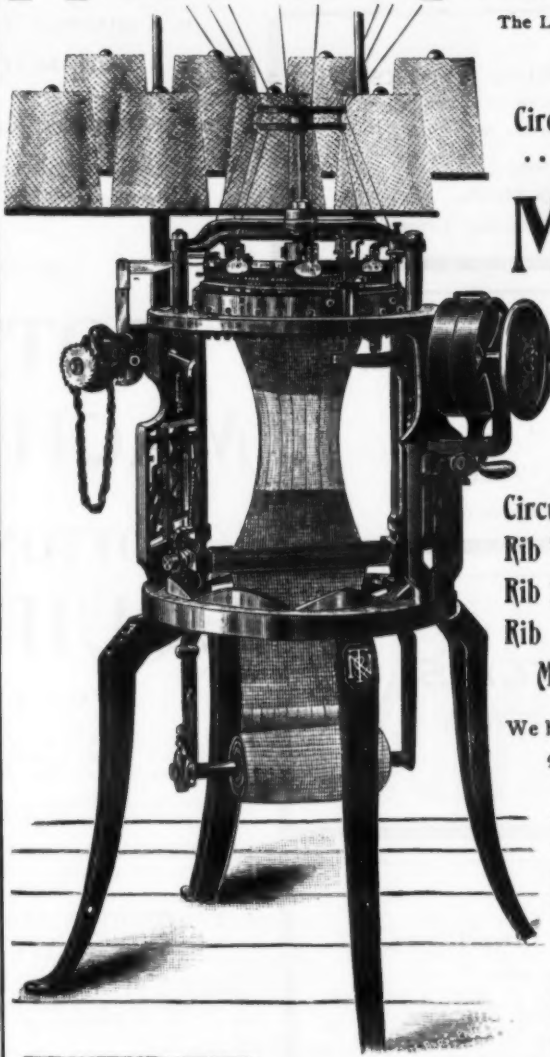
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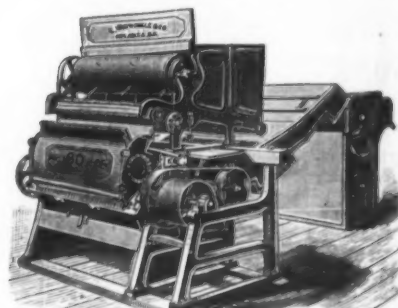
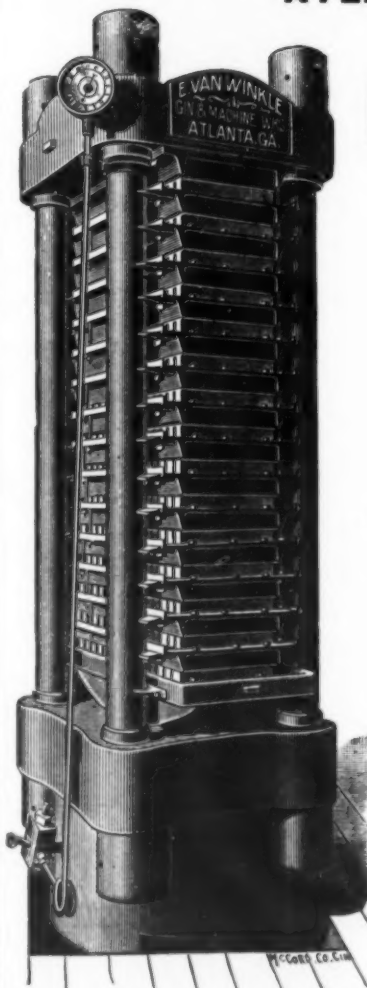
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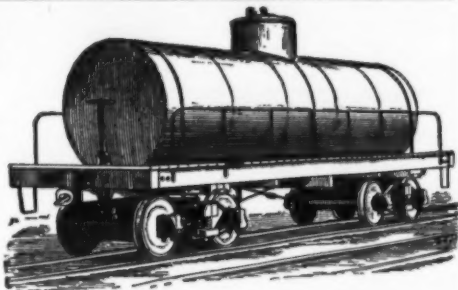
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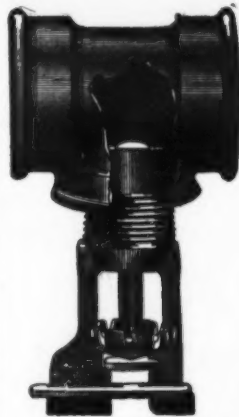
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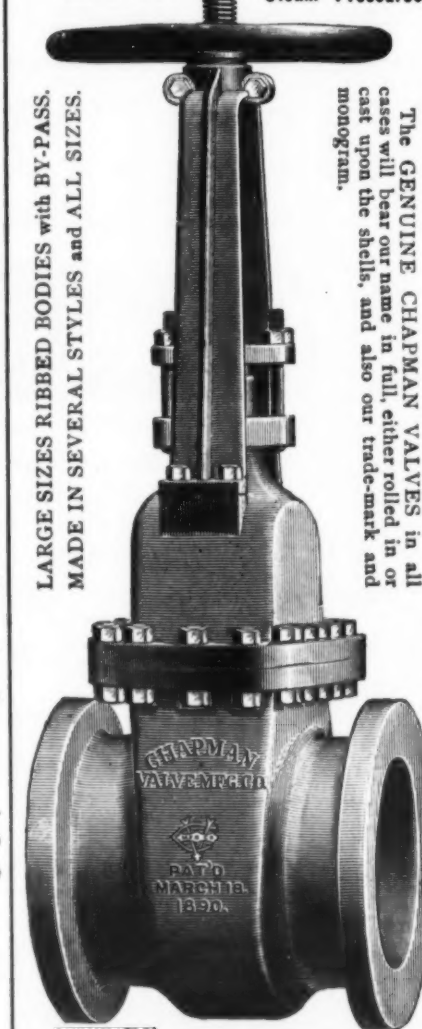
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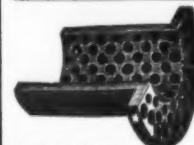
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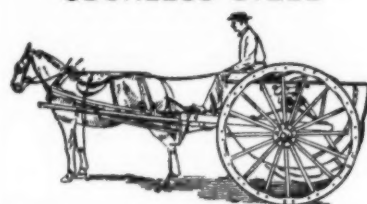
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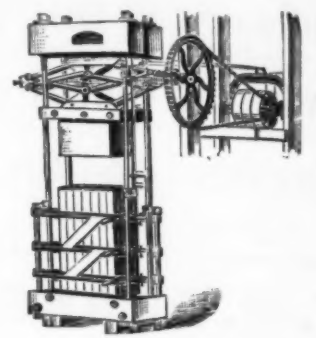
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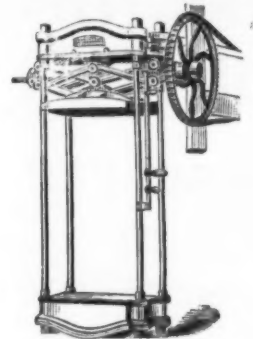
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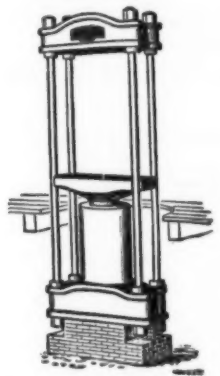
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Insures that faithfulness in performance which holds the confidence of the user.

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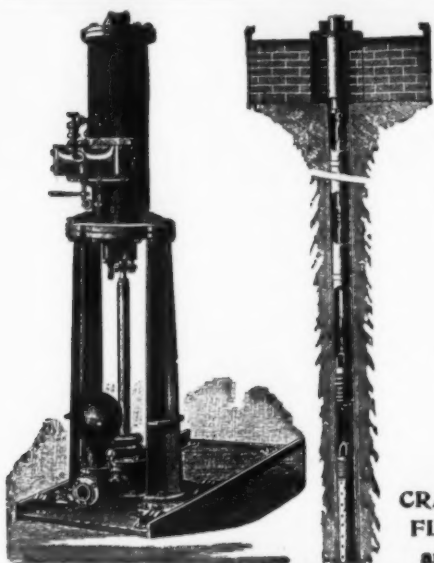
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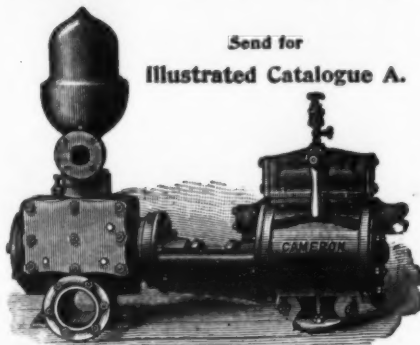


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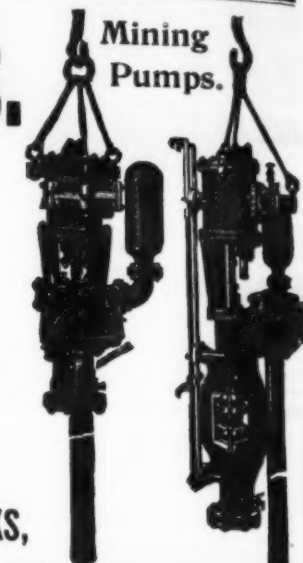
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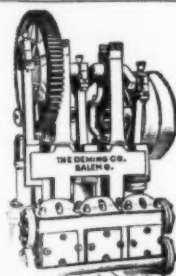
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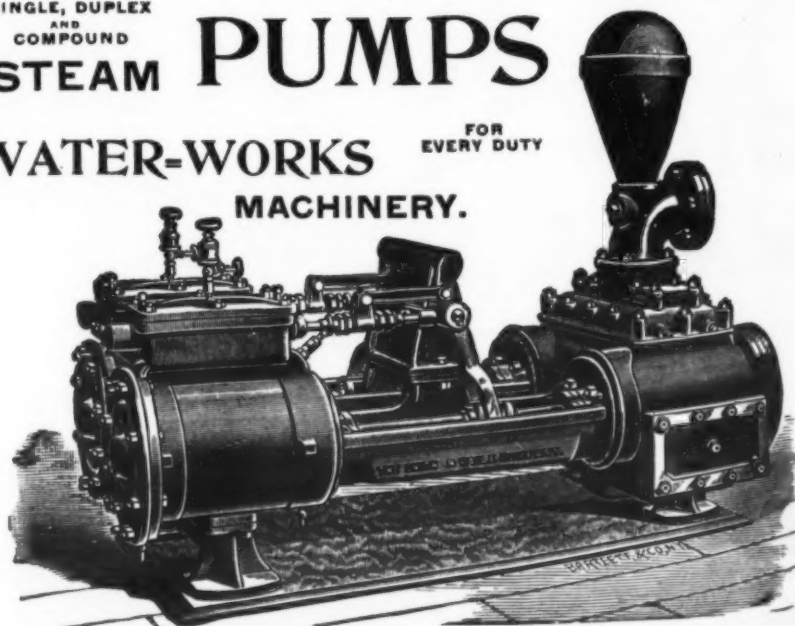
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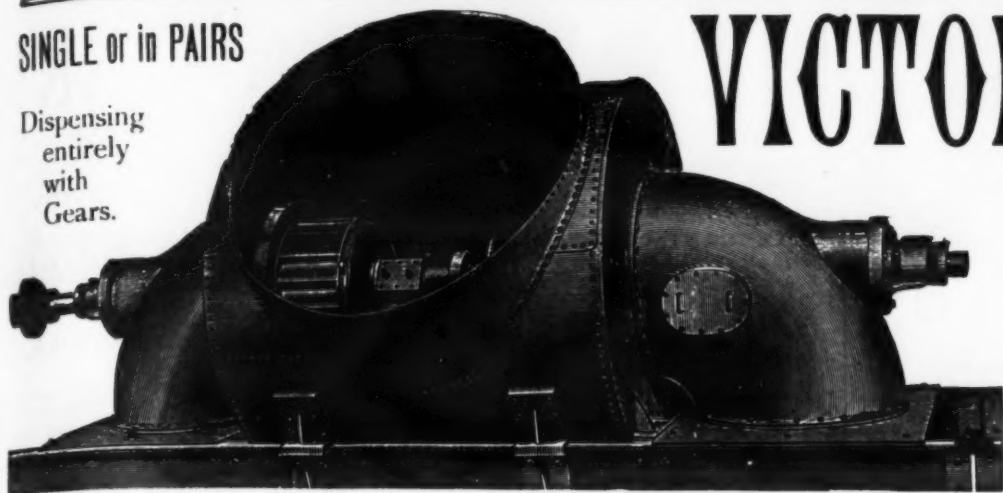
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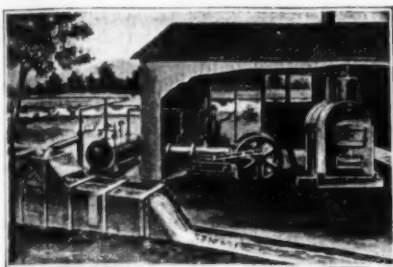
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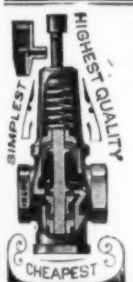
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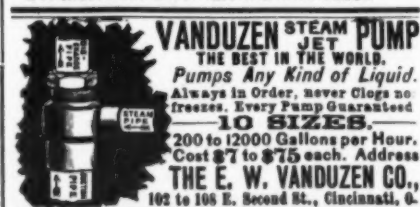
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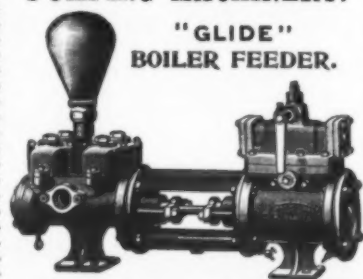
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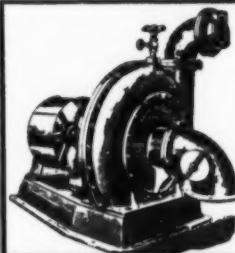
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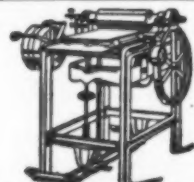
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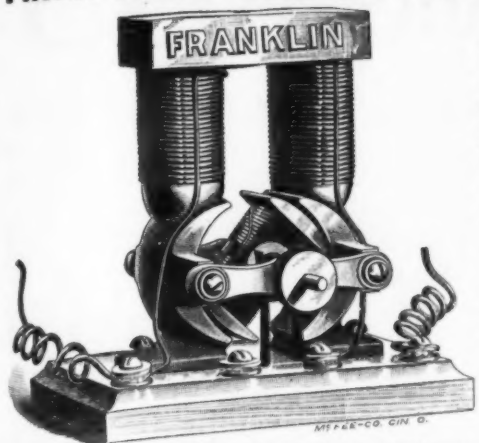
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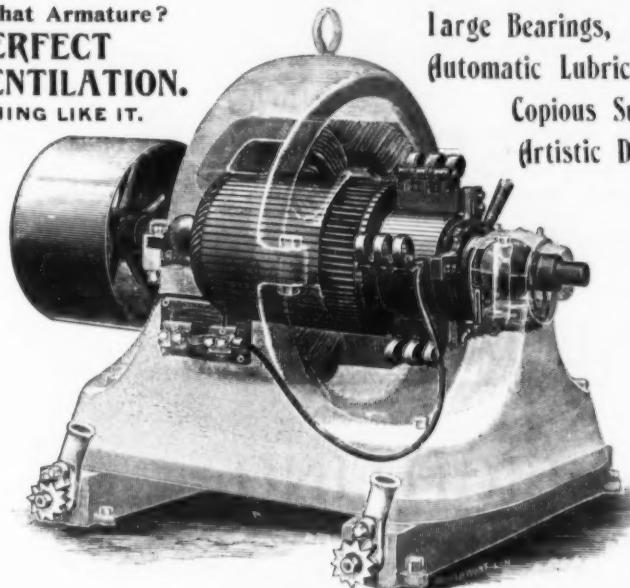
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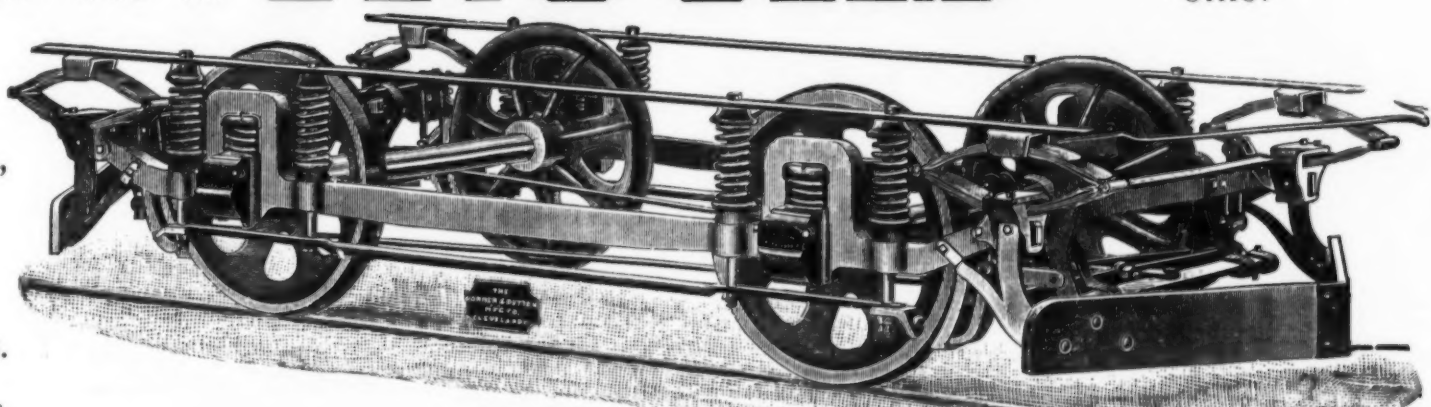
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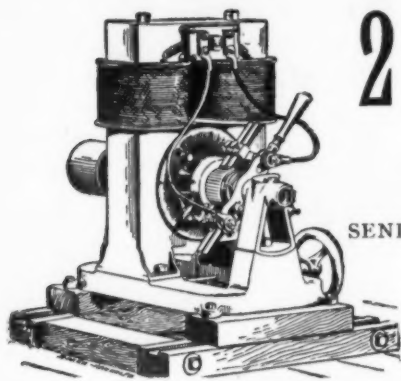
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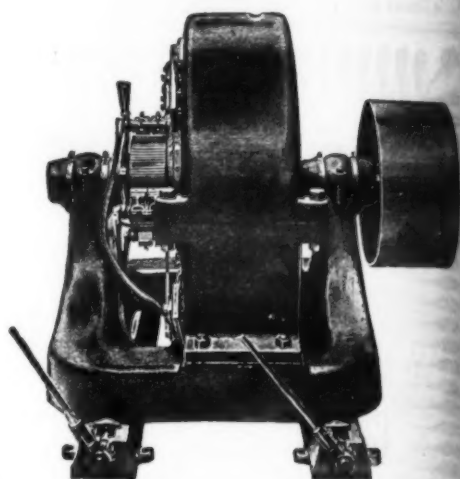
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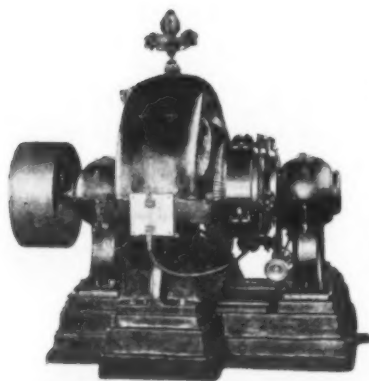
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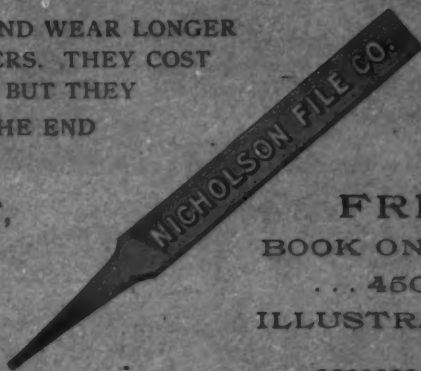
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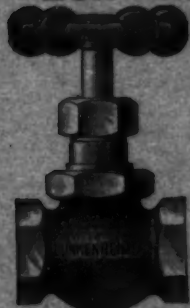


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